# TECHNICAL UNIVERSITY OF CRETE

# School

## of Electronic

### and Computer

#### Engineering

# Annual Activity Report

## Sep 2015 – Aug 2016

## Chania 2016

# Faculty Members

## Computer Science Division

- [Chalkiadakis Georgios, Associate Professor](#)
- [Deligiannakis Antonios, Associate Professor](#)
- [Garofalakis Minos, Professor](#)
- [Lagoudakis Michail, Associate Professor](#)
- [Mania Katerina, Associate Professor](#)
- [Petrakis Euripides, Professor](#)
- [Samoladas Vasilis, Assistant Professor](#)

## Electronics and Computer Architecture Division

- [Balas Costas, Professor](#)
- [Bucher Matthias, Associate Professor](#)
- [Dollas Apostolos, Professor](#)
- [Kalaitzakis Kostas, Professor](#)
- [Koutroulis Eftichios, Associate Professor](#)
- [Papaefstathiou Ioannis, Associate Professor](#)
- [Pnevmatikatos Dionisios, Professor](#)
- [Stavrakakis Georgios, Professor](#)

## Telecommunications Division

- [Bletsas Aggelos, Associate Professor](#)
- [Digalakis Vassilios, Professor](#)
- [Karystinos George, Associate Professor](#)
- [Koutsakis Polychronis, Associate Professor](#)
- [Liavas Athanasios, Professor](#)
- [Paterakis Michael, Professor](#)
- [Zervakis Michael, Professor](#)

## Faculty in the Sciences

- [Angelakis Dimitris, Assistant Professor](#)
- [Ellinas Demosthenes, Professor](#)
- [Manoussaki Daphne, Assistant Professor](#)
- [Petrakis Minos, Associate Professor](#)

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Georgios Chalkiadakis
**Rank:** Associate Professor
**Years in rank:** 0.5
**Division:** Computer Science
**Lab affiliation:** Intelligent Systems

## A – Teaching

- Undergraduate courses taught
    - COMP 201: Design and Development of Information Systems (mandatory)
    - COMP 402 Theory of Computation (mandatory)
    - COMP 517 Multi-agent Systems

- Graduate courses taught
    - COMP 601: Special Topics in Multi-agent Systems

- Curriculum & course development
    - Updated course material/slides for all aforementioned courses taught

## B – Publications

- Book chapters:

    - Angelos Chliaoutakis and Georgios Chalkiadakis: **Interpreting the Past through Agent-Based Modeling and GIS.** *In A. Sarris (ed.): _Best Practices of GeoInformatic Technologies for the Mapping of Archaeolandscapes._* Archaeopress. Submitted.  (published: November 2015)

    - Georgios Chalkiadakis and Michael Wooldridge: **Weighted Voting Games.** *In F. Brandt, V. Conitzer, U. Endriss, J. Lang, and A. Procaccia (eds.): **Handbook of Computational Social Choice**.* Cambridge University Press, April 2016.

- Publications in refereed journals

  - o Submitted:
    - Charilaos Akasiadis and Georgios Chalkiadakis: **Mechanism Design for Demand-Side Management. IEEE Intelligent Systems**, Special Issue on AI and Economics
    - Valentin Robu, Georgios Chalkiadakis, Ramachandra Kota, Alex Rogers, and Nicholas R. Jennings: **Rewarding Cooperative Virtual Power Plant Formation Using Scoring Rules. Energy**

  - o Accepted:
    - Angelos Chliaoutakis and Georgios Chalkiadakis: **Agent-Based Modeling of Ancient Societies and their Organization Structure. Journal of Autonomous Agents and Multi-Agent Systems (JAAMAS)**, 30(6), pages 1072-1116, November 2016 (published online first: 25 January 2016)

  - o Published:
    - Georgios Chalkiadakis, Gianluigi Greco, Evangelos Markakis: **Characteristic Function Games with Restricted Agent Interactions: Core-Stability and Coalition Structures. Artificial Intelligence (AIJ)**, 232, pages 76-113, March 2016 (available online: 23 Dec 2015)

- Publications in refereed conferences
  - o Published:
    - C. Akasiadis and G. Chalkiadakis: **Decentralized Large-Scale Electricity Consumption Shifting by Prosumer Cooperatives.** In Proc. of the 21$^{st}$ European Conference on Artificial Intelligence (**ECAI-2016**), The Hague, The Netherlands, August 2016
    - F. Christianos and G. Chalkiadakis: **Employing Hypergraphs for Efficient Coalition Formation with Application to the V2G Problem.** In Proc. of the 22nd European Conference on Artificial Intelligence (**ECAI-2016**), The Hague, The Netherlands, August 2016
    - A. Chliaoutakis and G. Chalkiadakis: **Evolutionary agent-based modeling of past societies' organization structure..** In Proc. of the 22nd European Conference on Artificial Intelligence (**ECAI-2016**), The Hague, The Netherlands, August 2016
    - A. Angelidakis and G. Chalkiadakis: **Optimal Prosumer Decicion-Making using Factored MDPs**. In Proc. of the 25th$^{st}$ International Joint Conference on Artificial Intelligence (**IJCAI-2016**), pages 4110-4114, New York, July 2016
    - A. Angelidakis and G. Chalkiadakis: **Factored MDPs for Optimal Prosumer Decision-Making in Continuous State Spaces**. In Proc. of the 13th European Conference on Multi-Agent Systems (**EUMAS-2015**), Athens, Greece, December 2015
    - Filippo Bistaffa, Georgios Chalkiadakis, Alessandro Farinelli, and Sarvapali D. Ramchurn: **Recommending Fair Payments for Large-Scale Social Ridesharing**. In Proc. of the 9th ACM Conference on

Recommender Systems (**ACM RecSys 2015**), Vienna, Austria, September 2015

# C – Awards & Distinctions

- ➢ **Editorial Board member for the Journal of Artificial Intelligence Research (JAIR) for a 3-year term: July 1, 2013-June 30, 2016.**
- ➢ *Elected Board Member* ("General Secretary") of the **Hellenic AI Society (EETN)** [elected two consecutive times for two 2-years term; *Jan 2015 - Dec 2016* and *Jan 2017-Dec 2019*]
- ➢ **Invited tutorial accepted at scientific conference:** *"Cooperative Games in Multiagent Systems".* Tutorial given at the 9th Hellenic Conference on Artificial Intelligence (SETN-2016), Thessaloniki, Greece, May 2016. http://setn2016.csd.auth.gr/?page_id=300

# D – Funded Projects

- ● Current projects:
  - o **Project "DART".** A Horizon 2020 project accepted under the SESAR-02-15 Call – "Data Science in Air Traffic Management". The objective of the DART project is to deliver understanding on the suitability of applying big data techniques for predicting multiple correlated aircraft trajectories based on data-driven models and accounting for air traffic management network complexity effects. **Duration: 2016-2018 Role:** *coordinator for the participating ECE-TUC team*
  - o **Project "RESCOOP Plus".** A Horizon 2020 project accepted under the Energy Efficiency call topic EE-10-2015 – "Consumer engagement for sustainable energy". The objective of the REScoop Plus project is to follow up on the RESCOOP20-20-20 project by making Renewable Energy Sources cooperatives in Europe go beyond their activities of producing and supplying energy, and take up energy savings for their members as a new pillar in their organisations. **Duration: 2016-2019 Role:** *coordinator for the participating ECE-TUC team*

- ● Project proposals submitted:
  - o One FET Horizon 2020 proposal

# E – Professional service

- ● Conference Technical Program Committee service
  - o The 25th International Joint Conference on Artificial Intelligence, New York, USA, July 2016 (**IJCAI-16**)
  - o The 30th AAAI Conference on Artificial Intelligence, Phoenix, Arizona, USA, February 2016 (**AAAI-16**)
  - o The 22nd European Conference on Artificial Intelligence, The Hague, The Netherlands, August 2016 (**ECAI-2016**)
  - o The 13th European Conference on Multiagent Systems **(EUMAS-2015)**, Athens, Greece, December 2015
  - o The 9th Hellenic Conference on Artficial Intelligence **(SETN-2016)**, Thessaloniki, Greece, May 2016
  - o The Machine Learning and Data Mining for Sports Analytics ECML/PKDD 2015 Workshop **(MLSA@ECML/PKDD 2015)**

- o The 13<sup>th</sup> German Conference on Multiagent System Technologies **(MATES 2015),** Cottbus, Germany, September 2015

- Conference Organization (specify role)
  - o Co-organizer of the *2<sup>nd</sup> Algorithmic Game Theory Workshop at IJCAI (**AGT@IJCAI-2016**),* an IJCAI-2016 workshop, New York, USA, July 2016
  - o Co-organizer of the *1<sup>st</sup> SETN workshop on AI for the Smart Grid (**AI4SG-2016**),* a SETN-2016 workshop, Thessaloniki, Greece, May 2016

- Reviewing activities

  - o Reviewer for the conferences and workshops I was a Program Committee member at (mentioned above)

  - o Reviewer for several journals; a subset of the following:
    - ▪ The "International Journal of Game Theory" (IJGT)
    - ▪ The "Artificial Intelligence" journal (AIJ)
    - ▪ The "Journal of Artificial Intelligence Research" (JAIR)
    - ▪ The "Journal of Autonomous Agents and Multiagent Systems" (JAAMAS)
    - ▪ The "Journal of Machine Learning Research" (JMLR)
    - ▪ The "IEEE Intelligent Systems" journal
    - ▪ The journal "IEEE Transactions on Systems, Man and Cybernetics, Part A"
    - ▪ The journal "IEEE Transactions on Systems, Man and Cybernetics, Part B"
    - ▪ The journal "IEEE Transactions on Systems, Man and Cybernetics, Part C"
    - ▪ The "International Journal on Artificial Intelligence Tools" (IJAIT)
    - ▪ The "ACM Transactions on Autonomous and Adaptive Systems" journal
    - ▪ The "Advances in Artificial Intelligence" journal
    - ▪ The "International Game Theory Review" journal (IGTR)
    - ▪ The "Journal of the Brazilian Computer Society"
    - ▪ The "Energy and Buildings" journal
    - ▪ The "Transportation Research Part C" journal

# G – Advising

- Active graduate students supervised

  - o Ph.D. and M.Sc. students supervised (advisor, completed)
    - ▪ Angelidakis Angelos (M.Sc.)

  - o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - ▪ Akasiadis Charilaos (Ph.D.)
    - ▪ Chliaoutakis Angelos (Ph.D.)
    - ▪ Tripolitakis Evangelos (Ph.D.)
    - ▪ Kydonakis Aris (M.Sc.)
    - ▪ Mamakos Michail (M.Sc.)

- o Ph.D. and M.Sc. Degrees (committee member)
    - ▪ Arapi Polyxeni (Ph.D.)
    - ▪ Orphanoudakis Emmanuel (M.Sc.)

- ● Undergraduate students supervised

    - o Diploma theses in progress
        - ▪ Georgara Athena: works on combining serious games with cooperative game theoretic ideas and concepts, and applying these to digital civics
        - ▪ Marios Asiminakis: works on applying machine learning and stochastic search techniques on solving the game of bridge
        - ▪ Filippos Christianos: works on mechanisms for the smooth integration of electric vehicles in the Smart Grid
        - ▪ Efthimios Floros: agent-oriented software engineering
        - ▪ Manos Karamalegos: applying learning and bargaining techniques in the Settlers of Catan strategy game
        - ▪ Michail-Angelos Papilaris: works on (inverse) reinforcement learning and recommendation systems

    - o Diploma theses in progress (committee member)
        - ▪ Bobolakis Georgios
        - ▪ Chatzipetrou Konstantinos
        - ▪ Efthimiou Georgios
        - ▪ Emmanouilidis Konstantinos
        - ▪ Konstantakis Georgios
        - ▪ Koukouzas Christos
        - ▪ Nikolopoulos Nikolaos
        - ▪ Papadopoulos Theodoros
        - ▪ Poulopoulos Dimitrios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Antonios Deligiannakis
**Rank:** Associate Professor
**Years in rank:** 3
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** Distributed Multimedia Information Systems and Applications (MUSIC)

## A – Teaching

- Undergraduate courses taught
    - o COMP 302 : Databases (mandatory)
    - o COMP 516 : Data Processing and Handling in Sensor Networks

- Graduate courses taught
    - o COMP 606 : Data Processing and Handling in Sensor Networks
    (Offered jointly with COMP 516)
    - o COMP 613 : Special Issues in Database Systems

- Labs taught

- Curriculum & course development
    - o New courses / labs developed
    - o Lecture notes / slides developed
    - o Authored textbooks

## B – Publications

- Publications in refereed journals

    - o Submitted: those published/appeared (see below)
        - ▪ Ioannis Flouris, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Kamp, Michael Mock
        Issues in complex event processing: Status and prospects in the Big Data era.
        Journal of Systems and Software

- Accepted:
  - Ioannis Flouris, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Kamp, Michael Mock:
    Issues in complex event processing: Status and prospects in the Big Data era.
    Journal of Systems and Software

- Published:

- Publications in refereed conferences

  - Submitted: those published/appeared (see below)
    - Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Taji Curin:
      FERARI: A Prototype for Complex Event Processing over Streaming Multi-cloud Platforms.SIGMOD Conference 2016: 2093-2096
    - Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis:
      Scalable Approximate Query Tracking over Highly Distributed Data Streams. SIGMOD Conference 2016: 1497-1512
    - Ioannis Demertzis, Stavros Papadopoulos, Odysseas Papapetrou, Antonios Deligiannakis, Minos N. Garofalakis:
      Practical Private Range Search Revisited. SIGMOD Conference 2016: 185-198
    - Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Marijo Volarevic:
      Complex event processing over streaming multi-cloud platforms: the FERARI approach: demo. DEBS 2016: 348-349

  - Accepted:
    - Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Taji Curin:
      FERARI: A Prototype for Complex Event Processing over Streaming Multi-cloud Platforms.
      SIGMOD Conference 2016: 2093-2096
    - Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis:
      Scalable Approximate Query Tracking over Highly Distributed Data Streams.
      SIGMOD Conference 2016: 1497-1512

- ▪ Ioannis Demertzis, Stavros Papadopoulos, Odysseas Papapetrou, Antonios Deligiannakis, Minos N. Garofalakis: Practical Private Range Search Revisited. SIGMOD Conference 2016: 185-198
- ▪ Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Marijo Volarevic: Complex event processing over streaming multi-cloud platforms: the FERARI approach: demo. DEBS 2016: 348-349

  - o Published:
    - ▪ Dimitris Sacharidis, Antonios Deligiannakis: Spatial cohesion queries. SIGSPATIAL/GIS 2015: 19:1-19:10
    - ▪ Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Taji Curin FERARI: A Prototype for Complex Event Processing over Streaming Multi-cloud Platforms. SIGMOD Conference 2016: 2093-2096
    - ▪ Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis: Scalable Approximate Query Tracking over Highly Distributed Data Streams. SIGMOD Conference 2016: 1497-1512
    - ▪ Ioannis Demertzis, Stavros Papadopoulos, Odysseas Papapetrou, Antonios Deligiannakis, Minos N. Garofalakis Practical Private Range Search Revisited. SIGMOD Conference 2016: 185-198
    - ▪ Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos N. Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Stajcer, Tomislav Krizan, Jonathan Yom-Tov, Marijo Volarevic: Complex event processing over streaming multi-cloud platforms: the FERARI approach: demo. DEBS 2016: 348-349

- ● Books and edited book chapters

- ● Patents

# C – Awards & Distinctions

- ➢ The paper
  Ioannis Demertzis, Stavros Papadopoulos, Odysseas Papapetrou, Antonios Deligiannakis, Minos N. Garofalakis:

Practical Private Range Search Revisited.
SIGMOD Conference 2016: 185-198
was rated as one of the top 4 papers in the top SIGMOD Conference and invited to submit an extended version to a special issue on the ACM Transactions on Database Systems journal – Best of SIGMOD/PODS'2016.

# D – Funded Projects

- Current projects:
    - o [2014 - 2017] FERARI: Flexible Event pRocessing for big dAta aRchItecture (FP7 project, started Feb 2014, duration 3 years) Role: Main Research Team Member

- Project proposals submitted:

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service
    - o SIGMOD - ACM SIGMOD International Conference on Management of Data
    - o VLDB - Very Large Data Bases
    - o ICDE - IEEE International Conference on Data Engineering
    - o CIKM - ACM International Conference on Information and Knowledge Management
    - o EDBT - International Conference on Extending Database Technology

- Conference Organization (specify role)

- Reviewing activities
    - o ACM Transactions on Database Systems (ACM TODS)
    - o TKDE - IEEE Transactions on Knowledge and Data Engineering
    - o BigData - Big Data Research

# F – Service to the School and the University

- School responsibilities
    - o Consultant in undergraduate studies (6th semester courses)

- University responsibilities

# G – Advising

- Active graduate students supervised

  o Ph.D. and M.Sc. students supervised (advisor, completed)

  o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Charalampakis Stergios (Ph.D.)
    - Flouris Ioannis (Ph.D.)
    - Igglezakis Antonios (M.Sc.)
    - Manikaki Vasiliki (M.Sc.)
    - Palolli Giorgo (M.Sc.)

  o Ph.D. and M.Sc. degrees awarded (committee member)

  o Ph.D. and M.Sc. Degrees (committee member)

- Undergraduate students supervised

  o Diploma theses in progress
    - Giannopoulos Emmanuel
    - Prountzos Georgios
    - Petheriotis Angelos

  o Diploma theses completed (supervisor)
    - Didymiotis – Ventouris Georgios
    - Karatza Dimitra
    - Tzimas Dimitrios

  o Diploma theses in progress (committee member)
    - Giannopoulos Emmanuel
    - Prountzos Georgios
    - Petheriotis Angelos

  o Diploma theses completed (committee member)
    - Makris Dimitrios-Ioannis
    - Vakanas Lenos
    - Souris Anastasios
    - Kyriakakis Dimitrios
    - Soultanopoulos Theodoros
    - Margaris Ioannis
    - Malindretos Eleftherios
    - Lyggeridis Christos
    - Theodosiou Nikolas

- Kastrinakis Marios
- Fytanoglou Iordanis
- Chorozoglou Dimitrios
- Katsikeas Sotirios
- Keros Alexandros-Dimitrios
- Kontogiannis Petros
- Lappas Dionysios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Minos Garofalakis
**Rank:** Professor
**Years in rank:** 8 years
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** SoftNet – Software Technology and Network Applications Laboratory
(Director)

## A – Teaching

- Undergraduate courses taught
    - o COMP 401: Algorithms and Complexity (mandatory)
    - o COMP 415: Advanced Topics in Database Systems

- Graduate courses taught
    - o COMP 615: Processing and Analyzing Big Data

- Labs taught

- Curriculum & course development
    - o New courses / labs developed

    - o Lecture notes / slides developed

    - o Authored textbooks

## B – Publications

- Publications in refereed journals

    - o Published:
        - ▪ Minos Garofalakis. ***"Approximate Geometric Query Tracking over Distributed Streams"***, *IEEE Data Engineering Bulletin*, Vol. 38, No. 3, September 2015 *(Special Issue on Approximate Query Processing and Applications)*, pp. 103-112.

- Publications in refereed conferences

  - Published:
    - Ioannis Demertzis, Stavros Papadopoulos, Odysseas Papapetrou, Antonios Deligiannakis, and Minos Garofalakis. "Practical Private Range Search Revisited",Proceedings of ACM SIGMOD'2016, San Francisco, California, June 2016. *[\*\* Invited to ACM Transactions on Database Systems \*\*]*
    - Nikos Giatrakos, Antonios Deligiannakis, and Minos Garofalakis. ***"Scalable Approximate Query Tracking over Highly Distributed Data Streams"***, *Proceedings of ACM SIGMOD'2016*, San Francisco, California, June 2016.
    - Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Štajcer, Tomislav Križan, Jonathan Yom-Tov, and Taji Ćurin. ***"FERARI: A Prototype for Complex Event Processing over Streaming Multi-Cloud Platforms"****(demo paper)*, *Proceedings of ACM SIGMOD'2016*, San Francisco, California, June 2016.
    - Ioannis Flouris, Vasiliki Manikaki, Nikos Giatrakos, Antonios Deligiannakis, Minos Garofalakis, Michael Mock, Sebastian Bothe, Inna Skarbovsky, Fabiana Fournier, Marko Štajcer, Tomislav Križan, Jonathan Yom-Tov, and Marijo Volarevic. ***"Complex Event Processing over Streaming Multi-Cloud Platforms - The FERARI Approach"*** *(demo paper)*, *Proceedings of ACM DEBS'2016*, Irvine, California, June 2016.
    - Apostolos Nydriotis, Pavlos Malakonakis, Nikos Pavlakis, Grigorios Chrysos, Ekaterini Ioannou, Euripides Sotiriades, Minos Garofalakis, and Apostolos Dollas. ***"Leveraging Reconfigurable Computing in Distributed Real-time Computation Systems"***, *Proceedings of BDPR'2016* (EDBT/ICDT Workshops), Bordeaux, France, March 2016.

- Books and edited book chapters
  - Minos Garofalakis, Johannes Gehrke, and Rajeev Rastogi (Eds*.). **"Data Stream Management -- Processing High-Speed Data Streams"***, Springer-Verlag, New York (Data-Centric Systems and Applications Series), July 2016 (ISBN 978-3-540-28607-3).
  - Chee-Yong Chan, Minos Garofalakis, and Rajeev Rastogi. ***"Indexed Regular Expression Matching"***, Entry in: *Encyclopedia of Algorithms* (Ming-Yang Kao, Ed.), Springer, 2016.

- Patents

## C – Awards & Distinctions

- ➤ Recipient of the **2015 Excellence in Research Award** of the Technical University of Crete.
- ➤ **Keynote Speaker***: "Distributed Data Streams and the Power of Geometry"* , 21st International Conference on Management of Data (COMAD'2016), Pune, India, March 2016.
- ➤ **Invited Speaker:** *"The Promise and Challenges of Big Data"* (in Greek), "TEDx Chania – Squaring the Circle", Chania, Greece, October 2015.

## D – Funded Projects

- Current projects:
  - o FP7-ICT-2013 (Scalable Data Analytics Objective) Collaborative STREP Project: *"FERARI – Flexible Event Processing for Big Data Architectures"* Duration : Feb. 2014 – Jan. 2017
    Total funding: 4.3Me, TUC budget: 693Ke
    Role: *Principal Investigator for TUC*
  - o FP7-ICT-2013 (Scalable Data Analytics Objective) Collaborative STREP Project: "QualiMaster – A Configurable Real-Time Data Processing Infrastructure *Mastering Autonomous Quality Adaptation"*
    Duration: Jan. 2014 – Dec. 2016
    Total funding: 3.7Me, TUC/TSI budget: 915Ke
    Role: *Principal Investigator for TUC/TSI*
  - o FP7 FET Flagship
    Project: *"The Human Brain Project – Ramp-up Phase"*
    Duration: 2013 – 2016
    TUC budget: 250Ke
    Role: *Principal Investigator for TUC (in charge of brain data analytics)*
  - o FP7-ICT-2011 Collaborative STREP
    Project: *"LEADS – Large-Scale Elastic Architecture for Data-as-a-Service"*
    Duration: Oct. 2012 – Sep. 2015
    Total funding: 2.9Me, TUC/TSI budget: 649Ke
    Role: *Principal Investigator for TUC/TSI*

- Project proposals submitted:

## E – Professional service

- Associate Editor duties
  - o Associate Editor, PVLDB, Vol. 9, 2016.

o Associate Editor: Foundations and Trends in Databases (FnTDB), Social Network Analysis and Mining (SNAM), Knowledge and Information Systems (KAIS), Statistical Analysis and Mining (SAM)
o Area Editor: Encyclopedia of Database Systems (2<sup>nd</sup> Ed.)

- Society Technical Committee duties

- Conference Technical Program Committee service
    o KDD'2016 (Senior PC Member), EDBT'2016, UAI'2016

- Conference Organization (specify role)

- Reviewing activities

# F – Service to the School and the University

- School responsibilities
    o Software Technology and Network Applications Laboratory, Director

- University responsibilities

# G – Advising

- Active graduate students supervised

    o Ph.D. and M.Sc. students supervised (advisor, completed)
        ▪ Mavrommatis Alexandros (M.Sc.)

    o Ph.D. and M.Sc. students supervised (advisor, in progress)
        ▪ Kalantzaki Calliope (Ph.D.)
        ▪ Toutoudakis Michail (Ph.D.)
        ▪ Vazaios Evangelos (Ph.D.)
        ▪ Nydriotis Apostolos (M.Sc.)
        ▪ Pavlakis Nikolaos (M.Sc.)

    o Ph.D. and M.Sc. awarded (committee member)
        ▪ Michelioudakis Evangelos (M.Sc.)
        ▪ Vlachou Georgia (M.Sc.)

    o Ph.D. and M.Sc. Degrees (committee member)
        ▪ Arapi Polyxeni (Ph.D.)
        ▪ Charalampakis Stergios (Ph.D.)
        ▪ Drymonas Efthimios (Ph.D.)

- ▪ Flouris Ioannis (Ph.D.)
- ▪ Georgogiannis Alexandros (Ph.D.)
- ▪ Konstantakis Christos (Ph.D.)
- ▪ Liampa Irene (Ph.D.)
- ▪ Igglezakis Antonios (M.Sc.)
- ▪ Kalaitzis Konstantinos (M.Sc.)
- ▪ Manikaki Vasiliki (M.Sc.)
- ▪ Mantakos Georgios (M.Sc.)
- ▪ Ninos Spyridon (M.Sc.)
- ▪ Palolli Giorgo (M.Sc.)
- ▪ Papathanasiou Athanasios (M.Sc.)
- ▪ Preventis Alexandros (M.Sc.)
- ▪ Rousopoulou Niki (M.Sc.)

- Undergraduate students supervised

  - o Diploma theses in progress

  - o Diploma theses completed (supervisor)
    - ▪ Eirini Asteri, "Distributed Sliding-Window Matrix Sketching", August 2016
    - ▪ Periklis Chrysogelos, "Streaming, High Performance Support Vector Methods", August 2016

  - o Diploma theses in progress (committee member)
    - ▪ Barberakis Stylianos
    - ▪ Boras Charalampos
    - ▪ Christodoulopoulos Christos
    - ▪ Giannopoulos Emmanuel
    - ▪ Gompaki Efstathia
    - ▪ Iordanou Konstantinos
    - ▪ Karandeinos Ektor
    - ▪ Petrou Eleni
    - ▪ Prountzos Georgios
    - ▪ Stathatos Stefanos

  - o Diploma theses completed (committee member)
    - ▪ Didimiotis – Ventouris Georgios
    - ▪ Gotsoulias Dimitrios
    - ▪ Karatza Dimitra
    - ▪ Keros Alexandros – Dimitrios
    - ▪ Kontogiannis Petros
    - ▪ Kritikakis Charalampos
    - ▪ Lappas Dionysios
    - ▪ Tzimas Dimitrios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Michail G. Lagoudakis
**Rank:** Associate Professor
**Years in rank:** 3
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** Intelligent Systems Laboratory

## A – Teaching

- Undergraduate courses taught
    - COMP 102: Structured Programming (mandatory) (Spring 2016)
    - COMP 417: Artificial Intelligence (Spring 2016)
    - COMP 513: Autonomous Agents (Fall 2015)

- Graduate courses taught
    - COMP 604: Machine Learning (Fall 2015)

- Labs taught
    - COMP 513 – Autonomous Agents Laboratory (Fall 2015)

- Curriculum & course development
    - New courses / labs developed
        - Added new laboratory exercises to Autonomous Agents Lab

    - Lecture notes / slides developed
        - New series of lecture slides for Structured Programming
        - New series of lecture slides for Machine Learning

## B – Publications

- Publications in refereed journals
    - Published:

- Publications in refereed conferences
    - Published:

- Books and edited book chapters
  - Published:
    - **Michail G. Lagoudakis**, Value Function Approximation, in Claude Sammut and Geoffrey I. Webb (Eds.), Encyclopedia of Machine Learning and Data Mining, Springer, 2015, pp. 1-15
    - **Michail G. Lagoudakis**, Least-Squares Reinforcement Learning Methods, in Claude Sammut and Geoffrey I. Webb (Eds.), Encyclopedia of Machine Learning and Data Mining, Springer, 2015, pp. 1-9

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:
  - "Basic Research in Statistical Spoken Dialogue Management", Principal Investigator for TUC: Vasileios Digalakis, *Toshiba Research Europe,* Cambridge, UK. March 2016–February 2018. Budget: 60,000£ (for TUC)

- Project proposals submitted:

## E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service
  - 9th ECE Student Conference (ECESCON) 2016

- Reviewing activities
  - Artificial Intelligence Journal
  - The Computer Journal
  - Neurocomputing
  - Optimization Letters

## F – Service to the School and the University

- School responsibilities
  - *Editor, Undergraduate Program Guide*

- University responsibilities

# G – Advising

- Graduate students
  - o Ph.D. and M.Sc. students completed (supervisor)
    - ▪ Evangelos Michelioudakis (M.Sc.), "Online Structure Learning for Markov Logic Networks using Background Knowledge Axiomatization", defended Apr 2016

  - o Ph.D. and M.Sc. theses in progress (supervisor)
    - ▪ Rexakis Ioannis (Ph.D.), "Reinforcement Learning via Supervised Learning", Enrollment: 2006 – part-time
    - ▪ Eleftherios Chatzilaris (M.Sc.), "Coordinated Action and Learning in RoboCup", Enrollment: 2009
    - ▪ Ioannis Skoulakis (M.Sc.), "Efficient Reinforcement Learning in Alternating Games ", Enrollment: 2010
    - ▪ Emmanuil Orfanoudakis (M.Sc.), "Event Recognition in Underwater Robot Team Missions", Enrollment: 2012

  - o Ph.D. and M.Sc. degrees completed (committee member)
    - ▪ Fachantidis Anestis (Ph.D.), Knowledge Transfer in Reinforcement Learning, Department of Informatics, Aristotelian University of Thessaloniki, defended Jul 2016
    - ▪ Koulieris Georgios–Alexandros (Ph.D.), "Context-aware Gaze Prediction applied to Game Level Design, Level-of-Detail and Stereo Manipulation", defended Sep 2015
    - ▪ Mavrommatis Alexandros (M.Sc.), "A Streaming Implementation of the Event Calculus", defended Apr 2016
    - ▪ Mylonakis Emmanuel (M.Sc.), "Octopus: A Collaborative Environment Supporting the Development of Effective Instructional Design", defended Apr 2016
    - ▪ Angelidakis Angelos (M.Sc.), "Factored MDPs for Optimal Prosumer Decision-Making in the Smart Grid", defended Nov 2015
    - ▪ Antonakakis Marios (M.Sc.), "Non-linear Synchronization Methods on Magnetoencephalographic (MEG) Recordings", defended Sep 2015

  - o Ph.D. and M.Sc. Degrees in progress (committee member)
    - ▪ Akasiadis Charilaos (Ph.D.)
    - ▪ Alevizos Panagiotis (Ph.D.)
    - ▪ Blazakis Konstantinos (Ph.D)
    - ▪ Flouris Ioannis (Ph.D.)
    - ▪ Klasinas Ioannis (Ph.D.)
    - ▪ Malakonakis Pavlos (Ph.D.)
    - ▪ Stravoskoufos Konstantinos (Ph.D.)
    - ▪ Dougiakis Lazaros (M.Sc.)

- Georgiadou Despoina (M.Sc.)
- Kalampogia Athena (M.Sc.)
- Konstantinidis Konstantinos (M.Sc.)
- Kontadakis Grigorios (M.Sc.)
- Kydonakis Aris (M.Sc.)
- Loukeris Nikolaos (M.Sc.)
- Mamakos Michail (M.Sc.)
- Pavlakis Nikolaos (M.Sc.)
- Preventis Alexandros (M.Sc.)
- Sifakis Ioannis (M.Sc.)
- Tsiganis Georgios (M.Sc.)
- Verykokidi Eleni – Angela (M.Sc.)
- Zervoudakis Nikolaos (M.Sc.)

- Undergraduate students

  - Diploma theses completed (supervisor)
    - None

  - Diploma theses in progress (supervisor)
    - Konstantakis Georgios
    - Nikolopoulos Nikolaos
    - Papadopoulos Theodoros
    - Poulopoulos Dimitrios

  - Diploma theses completed (committee member)
    - Karatza Dimitra, "Data Mining Algorithms over Akka & Storm Frameworks", defended Jul 2016
    - Sideris Panagiotis, "Speech synthesis with statistic models", defended Apr 2016
    - Gioti Varvara, "Crowdsourcing Android Application for Public Transport Position Tracking", defended Feb 2016
    - Phytanoglou Iordanis, "Head-Tracked, Stereo Ski Simulation Implemented on a High-End Head Mounted Display", defended Dec 2015
    - Malindretos Eleftherios, "Development of 3D Single-Player and Multi-Player Game", defended Oct 2015
    - Savva Androula, "Analysis and Quantification of Spatiotemporal Features of Diagnostics Importance in Cervical Neoplasia", defended Oct 2015

  - Diploma theses in progress (committee member):
    - Andritsou Daphne
    - Chatzipetrou Konstantinos
    - Floros Efthimios
    - Giannopoulos Emmanuel

- Ioannou Kostas
- Ioannou Nikolaos
- Lidas Stefanos
- Lytridis Nikolaos
- Papilaris Michail Angelos
- Stathatos Stefanos
- Stratigi Irene
- Theodorou Theodoros
- Tzagkarakis Eleftherios
- Vogiatzis Konstantinos
- Ypermahos Athanasios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Katerina Mania
**Rank:** Associate Professor
**Years in rank:** 3 year 3 months as Assoc. Professor
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** Distributed Multimedia Information Systems and Applications (MUSIC)

## A – Teaching

- Undergraduate courses taught
    - PLH 418 - Computer Graphics (Spring 2016)
    - PLH 101 – Introduction to Computers and Computer Science (Winter 2015)

- Graduate courses taught
    - PLH 612 – Visualization and Virtual Reality (Spring 2016)

- Curriculum & course development
    - Updated laboratory exercises for PLH 101
    - Updated large project work for PLH 418
    - Updated large project work for  PLH 612

## B – Publications

- Book chapters
    - Published
        - Sylaiou S., Mania K., Liarokapis F., White M., Walczak K., Wojciechowski R., W. Wiza, Patias P. (2016). Evaluation of a Cultural Heritage Augmented Reality Game. Cartographies de l' Esprit, de l' Ame et du Savoir/ Cartographies of Mind, Soul and Knowledge, Special Issue for the Emeritus Professor Myron Myrides, pp. 153-174, School of Rural and Surveying Engineers, Aristotle University of Thessaloniki, Thessaloniki: Editions Ziti.

- Publications in refereed journals

  - Submitted
    - Ragia, L., Sarri, F., Mania, K. (2016). Precise Photorealistic Visualization for Restoration of Historic Buildings based on Tacheometry Data. Submitted to *Journal of Geographical Systems.*

  - Published
    - Parthenios, P., Petrovski, S., Chatzopoulou, N., Mania, K. (2016). Reciprocal Transformations between Music and Architecture as a Real-time Supporting Mechanism in Urban Design. *International Journal of Architectural Computing*, Vol 14(4), 349-357.

- Publications in refereed conferences

  - Published
    - Koulieris, G.A., Drettakis, G., Cunninghmam, D., Mania, K. (2015). Gaze Prediction using Machine Learning for Dynamic Stereo Manipulation in Games, full paper track, *IEEE Virtual Reality 2016*, pp. 113-120, Greenville, South Carolina USA.
    - Kontadakis, G., Proimaki, D., Chasiouras, D., Mania, K. (2016). Gamified 3D Orthopedic Rehabilitation using Low-Cost and Portable Inertial Sensors. Poster at *Computer Graphics International 2016* (sponsored by ACM and Eurographics).
    - Kousanakis, M., Mytakis, D., Dollas, A., Mania, K., Poirazi, P., Sotiriades, E., Papoutsi, A., Petrantonakis, P.C., Papaefstathiou, I. (2016). Reconfigurable Hardware SSN Acceleration based on the Hodgkin and Huxley Model and Interactive Visualization of the Results. Poster, *Dendrites 2016.*
    - Moirogiorgou, K., Nerantzaki, S., Livanos, G., Antonakakis, M., Nikolaidis, N., Petrakis, E., Savakis, A., Giakos, G., Zervakis, M., Mania, K. (2015). Color Characteristics for the Evaluation of Suspended Sediments. In Proc. *IEEE Imaging Systems and Techniques*, 1-5, Macau, China.
    - Parthenios, P., Mania, K., Petrofski, S. (2015). Reciprocal Transformations between Music and Architecture as a Real-Time Supporting Mechanism in Urban Design. In *Proc. 33rd Annual Conf. on* Education and Research in Computer Aided Architectural Design in Europe, pp. 493-499, Volume 1, Vienna.

# C – Awards & Distinctions

## D – Funded Projects

- Current projects (at the Technical University of Crete, Greece):

    o CYBERSENSORS: High Frequency Monitoring System for Integrated Water Resources Management of Rivers', THALIS, PI Prof. Nikos Nikolaidis, 2012-2015, TUC ECE PI Prof. Michalis Zervakis, Scientific Collaborator.

## E – Professional service

- Associate Editor duties

    o Associate Editor, *Presence Tele-operators and Virtual Environments,* MIT Press (since June 2006)
    o Associate Editor, *ACM Transactions on Applied Perception*, ACM Press (since September 2007)

- Conference Technical Program Committee service - membership

    o Computer Graphics International 2016 (CGI 2016), in co-operation with ACM Siggraph, Eurographics
    o ACM Symposium on Applied Perception 2015, 2016
    o Edutainment 2016
    o Second International Conference on Internet of Things and Cloud Computing 2016 (ICC 2016, sponsored by ACM and Springer)
    o International Conference on Virtual Reality and Visualization 2016 (ICVRV 2016, sponsored by IEEE)
    o IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016)
    o [IEEE Int. Conf. in Games and Virtual Worlds for Serious Applications](#) (VSGames), sponsored by IEEE, 2015, 2016

- Reviewing activities

    o Various international conferences and journals

## F – Service to the School and the University

- School responsibilities

    o Studies' advisor for the Dept. of ECE, 2014-2015

# G – Advising

- Active graduate students supervised

  - Graduate students supervised
    - Giwrgos Alexandros Koulieris 'Selective Rendering Algorithms based on Human Perception Memory Schemas' (Ph.D candidate, accepted for admission to PhD program, defended September 2015)
    - Katerina Malisova 'Conceptual 3D Visualization Methodologies' (M.Eng. candidate)
    - Grigorios Kontadakis (MEng TUC) 'Pedagogically-driven Interactive 3D Applications' (M.Eng. candidate)
    - Niki Rousopoulou (M.Eng. TUC)

  - Ph.D. and M.Sc. awarded (committee member)
    - Antonakakis Marios (M.Sc.)
    - Karalas Konstantinos (M.Sc.)
    - Mylonakis Emmanuel (M.Sc.)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Oikonomidis Dimitrios (Ph.D)
    - Pezoulas Vasilios (M.Sc.)
    - Pitsiladis Andreas (M.Sc.)
    - Sifakis Ioannis (M.Sc.)
    - Syntzanaki Athena (M.Sc.)
    - Trochatou Ioanna (M.Sc.)

  - Diploma theses completed (supervisor)

    - Fotis Pegios 'Advanced 3D Rendering Effects using a Field Programmable Gate Array' [Paper submission]
    - Nikos Sidorakis 'Eye tracking Evaluation of a High-Level Visual Saliency Predictor' [IEEE VR 2015 workshop paper]
    - Iordanis Fytanoglou 'Head Tracked Stereo Ski Simulation implemented on a High End Head Mounted Display'
    - Lefteris Malindretos 'Development of a Role-Playing Game of Single and Multiple Players'
    - Christos Liggeridis 'A 3D mobile Application for the Social Networking of an Academic Community'
    - Dimitris Kiriakakis 'Augmented Reality Applications for Mobile Platforms'

- Diploma theses supervised (in progress)

  - Christos Panou 'An Outdoors Augmented Reality Application for Android featuring a Cultural Route through the Old Town of Chania'
  - Thanos Sariggelos 'Looparound: Development of a Web-based Platform for Musical Loops using 3D Objects in WebGL and a Virtual Sequencer'
  - Kostas Ioannou '3D Racing Game Development with Autonomous Opponents'
  - Bobolakis Georgios 'Occupational therapy application for kids diagnosed with Attention-Deficit Hyperactivity Disorder for Android platforms'
  - Stavroulakis Alexis 'Virtual Reality User Interface and Game Design using Leap Motion and Oculus Rift Technologies'
  - Konstantinos Chatzipetrou '3D computer gaming for Smart Vehicular combat racing'
  - Theodoros Theodorou 'Development of a 3D real-time Strategy Game with Intelligent Opponent Behaviours'

- Diploma theses in progress (committee member)
  - Fragakis Panteleimon
  - Geronimakis Theodoros
  - Kirakosian Salva
  - Konstantopoulos Konstantinos
  - Koutsouris Themistoklis
  - Paravolidakis Vasilios
  - Politis Marios

- Diploma theses completed (committee member)
  - Dretaki Paraskevi
  - Mytakis Dimitrios
  - Pezoulas Vasilios
  - Petronikolos Konstantinos
  - Tsakaneli Stavroula

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Euripides G.M. Petrakis
**Rank:** Professor
**Years in rank:** 3
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** Intelligent Systems Laboratory

# A – Teaching

- Undergraduate courses taught
    - COMP 202 : Data Structures and File Structures (mandatory)
    - AIS 413 : Multimedia Data Management
    - AIS 414: Machine Vision

- Graduate courses taught
    - AIS 605 : Special Topics in Information Systems

- Labs taught
    - AIS 413 : Multimedia Data Management
    - COMP 202 : Data Structures and File Structures

- Curriculum & course development
    - New courses / labs developed
        - COMP518: Services in the Cloud and the Fog

    - Lecture notes / slides developed
        - COMP518: Services in the Cloud and the Fog

    - Authored textbooks

# B – Publications

- Publications in refereed journals

    - Submitted:

- o Accepted:

- o Published:
  - Sotirios Batsakis, **Euripides G.M. Petrakis**, Ilias Tachmazidis, Grigoris Antoniou, "Temporal Representation and Reasoning in OWL 2", Semantic Web Journal (SWJ), July 2016 (to appear).
  - Konstantinos Douzis, Stelios Sotiriadis, **Euripides G.M. Petrakis**, Christiana Amza, "Modular and Generic IoT Management on the Cloud", Future Generation Computer Systems, 2016.
  - Stelios Sotiriadis, Nik Bessis, Euripides G.M. Petrakis, Cristiana Amza, Catalin Negru, Mariana Mocanu, "Virtual Machine Cluster Mobility in Inter-Cloud Platforms", Future Generation Computer Systems (FGCS), Special Issue Midleware Services for Heterogeneous Distributed Computing (MidHDC), 2016.
  - Stylianos Balampanis, Stelios Sotiriadis, Euripides Petrakis, "Internet of Things Architecture in Cloud Computing for Enhanced Living Environments", Cloud Computing for Enhanced Living Environments: Algorithms, Architectures and Platforms (Cloud4ELE), pp. 28-36, November/December 2016.
  - Konstantinos Stravoskoufos, **Euripides G.M. Petrakis**, Nikolaos Mainas, Sotirios Batsakis, Vasilis Samoladas, "SOWL QL: Querying Spaito - Temporal Ontologies in OWL", Journal on Data Semantics, 2016

- Publications in refereed conferences

  - o Accepted:

  - o Published:
    - Theodoros Soultanopoulos, Stelios Sotiriadis, Euripides G.M. Petrakis, Christianna Amza, "Internet of Things Data Management in the Cloud for Bluethooth Low Energey (BLE) Devices", Workshop on Adaptive Resource Management and Scheduling for Cloud Computing (ARMS-CC 2016), Chicago, Illinois, July 29th, 2016.
    - Konstantinos Stravoskoufos, Stelios Sotiriadis, Euripides G.M. Petrakis, "IoT-A and FIWARE: Bridging the Barriers Between the Cloud and IoT Systems Design and Implementation", 6th International Conference on Cloud Computing and Services Science (CLOSER 2016), Rome, Italy, April 23-25, 2016.
    - V. Leska, E.S. Bei, E. Petrakis, and M. Zervakis, "Gene Expression Data Analysis for Classification of Bipolar Disorders", XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016 (MEDICON 2016), pp. 500–506, Paphos, Cyprus, March 31 – April 2, 2016.

- Stelios Sotiriadis, Lenos Vakanas, Euripides Petrakis, Paolo Zampognaro, Nik Bessis, "Automatic Migration and Deployment of Cloud Services for Healthcare Application Development in FIWARE", The 30th IEEE International Conference on Advanced Information Networking and Applications (AINA-2016), Crans-Montana, Switzerland, March 23-25, 2016
- Chryssa Thermolia, Ekaterini S. Bei, Euripides G.M. Petrakis, Vangelis Kritsotakis, Vangelis Sakkalis, "An Ontological-Based Monitoring System for Patients with Bipolar I Disorder", IEEE 2015 International Conference on Biomedical Engineering and Computational Technologies (SIBIRCON), Novosibirsk, Russian Federation, October 28-30, 2015.
- Konstantia Moirogiorgou, Sofia Nerantzaki, Giorgos Livanos, Marios Antonakakis, Nikolaos P. Nikolaidis, Euripides G.M. Petrakis, Andreas E. Savakis, George Giakos and Michalis Zervakis, "Color Characteristics for the Evaluation of Suspended Sediments", IEEE International Conference on Imaging Systems and Techniques (IST 2015), Macau, China, September 16-18, 2015.
- George Livanos, Michalis Zervakis, Euripides G.M. Petrakis, Konstantina Moirogiorgou, Marios Antonakakis, "Lung Tissue Evaluation Detecting and Measuring Morphological Characteristics of Cell Regions", IEEE International Conference on Imaging Systems and Techniques (IST 2015), Macau, China, September 16-18, 2015.

- Books and edited book chapters

  - Stelios Sotiriadis, Konstantionos Stravoskoufos, Euripides G.M. Petrakis, "Future Internet Systems Design and Implementation, Cloud and IoT Services based on IoT-A and Fiware", V. Angelakis, E. Z. Tragos, A. Kapovits, H. C Poehls, A. Bassi, Designing, Developing and Facilitating Smart Cities: Urban Design to IoT Solutions, Springer Book, 2016

- Patents

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - ***"FI-STAR: Future Internet Social and Technological Alignment Research"*** (2013-2015), FP7-IP, Duration 30 months, Project budget €13,500,000, Budget for TUC €508,500, (role in project: principal investigator for TUC).
  - ***"AI-CARE, Advanced Knowledge Management Systems with Inherence Computational Intelligence and Applications in Health Care"***, (2013-2015), Ministry of Development, Greek Secretariat for Research and Technology,

Project Budget €343.875, Budget for TUC €126,000, (role in project: coordinator.)

- o *"Medical Devices Vigilance for Patient Safety)"*, (2012-2015), Ministry of Development, Greek Secretariat for Research and Technology, Project Budget €600,000, Budget for TUC €112,000, (role in project: principal investigator for TUC.)

- Project proposals submitted:
  - o Several proposals submitted in various Horizon2020, ESPA, Intereg Calls

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service
  - o Guest Editor in Special Issue on "Multimedia Systems for Critical Engineering Applications", Journal Multimedia Tools and Applications, 2016, 2017.
  - o Program committee member of the IEEE Intern. Conference on Imaging Systems and Techniques (IST 2016), October 4-6, 2016, Chania, Greece
  - o Program committee member, 13th IEEE International Conference on BioInformatics and BioEngineering, November 11-13, 2015 Chania, Greece
  - o Program committee member, "International Symposium on Visual Computing (ISVC)" 2015.

- Conference Organization (specify role)

- Reviewing activities
  - o Reviewer for Several conferences / journals

# F – Service to the School and the University

- School responsibilities
  - o Laboratory Director, Intelligent Systems Laboratory, School of Electronicand Computer Engineering, Technical University of Crete
  - o Dean's committee member, elected from faculty body of ECE
  - o Member of the Board, Telecommunication Research Institute

- University responsibilities

# G – Advising

- Active graduate students supervised

    o Ph.D. and M.Sc. students supervised (advisor, completed)
        - Georgiladakis Spyridon (M.Sc.)

    o Ph.D. and M.Sc. students supervised (advisor, in progress)
        - Drymonas Efthimios (Ph.D)
        - Stravoskoufos Konstantinos (Ph.D.)
        - Mainas Nikolaos (M.Sc.)
        - Preventis Alexandros (M.Sc.)
        - Thermolia Chryso (M.Sc.)

    o Ph.D. and M.Sc. degrees awarded (committee member)
        - Christoulakis Marios (M.Sc.)

    o Ph.D. and M.Sc. Degrees (committee member)
        - Livanos Georgios (Ph.D)
        - Malandrakis Nikolaos (Ph.D)
        - Moirogiorgou Konstantia (Ph.D)
        - Oikonomidis Dimitrios (Ph.D)
        - Rexakis Ioannis (Ph.D)
        - Chorianopoulou Arodami (M.Sc.)
        - Giannoudaki Maria (M.Sc.)
        - Kydonakis Aris (M.Sc.)
        - Palolli Giorgo (M.Sc.)
        - Pitsiladis Andreas (M.Sc.)
        - Trohatou Ioanna (M.Sc.)
        - Xifaras Konstantinos (M.Sc.)

- Undergraduate students supervised

    o Diploma theses in progress
        - Antonopoulos Filippos
        - Kargatzis Dimitrios
        - Rousalis Apostolos
        - Tsiachri – Renta Pelagia

    o Diploma theses completed (supervisor)
        - Kostopoulos Panagiotis
        - Soultanopoulos Theodoros
        - Vakanas Lenos

- Diploma theses in progress (committee member)
    - Pogas Nektarios

- Diploma theses completed (committee member)
    - Chorozoglou Dimitrios
    - Leska Valsamo
    - Tsakaneli Stavroula

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Vasilis Samoladas
**Rank:** Assistant Professor
**Years in rank:** 11 years
**Full-time or part-time:** Full-time
**Division:** Computer Science
**Lab affiliation:** Software Technology and Network Applications Laboratory

## A – Teaching

- Undergraduate courses taught
    - COMP 301 : Operating Systems (mandatory)
    - COMP 402 : Theory of Computation
    - COMP 420 : Principles of Distributed Software Systems

- Graduate courses taught
    - COMP 607 : Principles of Distributed Software Systems
    (Offered jointly with COMP 420)

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed

    - Authored textbooks

## B – Publications

- Publications in refereed journals
    - Submitted: those published/appeared (see below)

    - Accepted:

    - Published:

        ▪ Konstantinos Stravoskoufos, Euripides G.M. Petrakis, Nikolaos Mainas, Sotirios Batsakis, Vasilis Samoladas, "SOWL QL: Querying Spaito - Temporal Ontologies in OWL", Journal on Data Semantics, 2016

- Publications in refereed conferences
  - Published:

- Patents
  - *GRANTED*
    1.

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - _____

- Project proposals submitted:
  - _____

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)

- Reviewing activities

# F – Service to the School and the University

- School responsibilities

- University responsibilities

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)
    - Vlachou Georgia (M.Sc.)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Chatzisymeon Georgios (Ph.D.)
    - Babalis Charalampos (M.Sc.)
    - Mantakos Georgios (M.Sc.)
    - Ninos Spyridon (M.Sc.)
    - Kasimatis Vasilios (M.Sc.)

- o Ph.D. and M.Sc. degrees awarded (committee member)
  - ▪ Christoulakis Marios (M.Sc.)

- o Ph.D. and M.Sc. Degrees (committee member)
  - ▪ Charalabakis Stergios (Ph.D.)
  - ▪ Kalantzaki Calliope (Ph.D.)
  - ▪ Toutoudakis Michail (Ph.D.)
  - ▪ Tripolitakis Evangelos (Ph.D.)
  - ▪ Vazaios Evangelos (Ph.D.)
  - ▪ Bervanakis Markos (M.Sc.)
  - ▪ Galanommatis Ioannis (M.Sc.)
  - ▪ Mamakos Michail (M.Sc.)
  - ▪ Manikaki Vasiliki (M.Sc.)
  - ▪ Nydriotis Apostolos (M.Sc.)
  - ▪ Skoulakis Ioannis (M.Sc.)

- ● Undergraduate students supervised

  - o Diploma theses in progress
    - ▪ Stathatos Stefanos

  - o Diploma theses completed (supervisor)
    - ▪ Horozoglou Dimitrios
    - ▪ Keros Alexandros – Dimitrios
    - ▪ Lappas Dionysios

  - o Diploma theses in progress (committee member)
    - ▪ Andronikakis Andreas
    - ▪ Antonopoulos Filippos
    - ▪ Barberakis Stylianos
    - ▪ Drakoulaki Eleni
    - ▪ Iggilis Anastasia
    - ▪ Kargatzis Dimitrios
    - ▪ Koukounas Angelos – Panagiotis
    - ▪ Koukousoulas Pantelis
    - ▪ Krikorian Arman
    - ▪ Lykoudis Georgios
    - ▪ Papadakis Orion-Nikolaos
    - ▪ Pouli Christina
    - ▪ Prountzos Georgios
    - ▪ Rousalis Apostolos
    - ▪ Troulitakis Apostolos
    - ▪ Tsiachri Renta Pelagia
    - ▪ Varikos Antonios
    - ▪ Vogiatzis Konstantinos

  - o Diploma theses completed (committee member)
    - ▪ Margaris Ioannis
    - ▪ Taxiarchis Vaios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Costas Balas
**Rank:** Professor
**Years in rank:** 2
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Electronics Laboratory, Director

# A – Teaching

- Undergraduate courses taught
    - ACE 204: Electronics I (mandatory)
    - ACE 412: Optoelectronics
    - ACE 513: Biomedical Engineering

- Graduate courses taught
    - ACE 603 : Advanced Electronic Imaging and Applications
    - ACE 607 : Optoelectronics
    (Offered jointly with ACE 412)

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed

    - Authored textbooks

# B – Publications

- Publications in refereed journals
    - Submitted: those published/appeared (see below)

    - Accepted:
        - Balas C., Epitropou G., Tsapras A., Hadjinicolaou N., "Hyperspectral Imaging and Spectral Classification for Pigment Identification and Mapping in Paintings by El Greco and his Workshop", accepted for

publication at Multimedia Tools and Application Journal in 4th Quarter of 2017

- o Published:

- Publications in refereed conferences
    - o Published:
        - Tsapras, E.Terzakis, E.Papadakis, C.Balas, A.M. Makris, C.Tsatsanis, E.N. Stathopoulos, "Hyperspectral imaging and spectral classification for assisting in vivo diagnosis of melanoma precursors: preliminary results obtained from mice," 2016 IEEE International Conference on Imaging Systems and Techniques (IST), Chania, 2016, pp. 379-383.
        doi:10.1109/IST.2016.7738255
        - Balas, G. Epitropou, A. Tsapras and N. Hadjinicolaou, "A novel hyperspectral camera and analysis platform for the non-destructive material identification and mapping: An application in paintings by El Greco," 2016 IEEE International Conference on Imaging Systems and Techniques (IST), Chania, 2016, pp. 211-215.
        doi: 10.1109/IST.2016.7738225
        - Vourlaki, G. Livanos, T. Giakoumakis, M. Zervakis, G. Giakos and C. Balas, "Recursive-mode K-means clustering for self-organization of Dynamic Imaging data," 2016 IEEE International Conference on Imaging Systems and Techniques (IST), Chania, 2016, pp. 54-59.
        doi: 10.1109/IST.2016.7738197
        - Vourlaki, G. Livanos, M. Zervakis, C. Balas and G. Giakos, "Spectral data self-organization based on bootstrapping and clustering approaches," 2015 IEEE International Conference on Imaging Systems and Techniques (IST), Macau, 2015, pp. 1-6.
        doi: 10.1109/IST.2015.7294546

- Patents

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
    - o *"OncoSeed Diagnostics : Biology of Circulating Tumour Cells, Distant Metastasis & Development of Liquid Biopsy Methods"*, Funding Source : National Strategic Reference Framework (NSRF 2007 - 2013), Sectoral Operational Programmes, Operational Program Competitiveness & Entrepreneurship, "COOPERATION" – SUB ACTION II  : Large Scale Cooperative Projects, Budget : € 358.250,00, Duration : Dec. 2010 – Dec. 2015

- Project proposals submitted:

# E – Professional service

- Associate Editor duties
    - Guest Editor of the special issue on Special Issue on Biomedical Imaging Systems for BSPC journal Biomedical Signal Processing and Control (BSPC) Elsevier, 2017
    - Editorial Board member Journal of Applied Sciences

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)
    - IST-IEEE

- Reviewing activities
    - 7_Journal paper reviews

# F – Service to the School and the University

- School responsibilities
    - Director of the Electronics Lab

- University responsibilities
    - Member of the School's Board (Dean's Committee)

# G – Advising

- Active graduate students supervised

    - Ph.D. and M.Sc. students supervised (advisor, completed)

    - Ph.D. and M.Sc. students supervised (advisor, in progress)
        - Tsapras Athanasios (Ph.D.)
        - Petrantonaki Maria (Ph.D.)
        - Rossos Christos (Ph.D.)
        - Epitropou Giorgos (M.Sc.)
        - Kastrinakis Marios (M.Sc.)
        - Papathanasiou Athanasios (M.Sc.)

- Ph.D. and M.Sc. degrees awarded (committee member)
  - Koulieris Georgios – Alexandros (Ph.D.)
  - Mavredakis Nikolaos (Ph.D.)
  - Gyroukis Georgios (M.Sc.)

- Ph.D. and M.Sc. Degrees (committee member)
  - Bassford Michalis Dimitris (Ph.D.)
  - Makris Nikolaos (Ph.D.)
  - Jaohar Osman (M.Sc.)
  - Kostopoulos Konstantinos (M.Sc.)
  - Nikolaou Aristides (M.Sc.)
  - Savvakos Charalampos (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Boras Charalampos
    - Bousias Dimitrios
    - Emmanouilides Konstantinos
    - Sioutas Apostolos
    - Vogiatzis Konstantinos

  - Diploma theses completed (supervisor)
    - Dousakis Alexandros
    - Dretaki Paraskevi
    - Gotsoulias Dimitrios
    - Margaris Ioannis
    - Symeou Andreas
    - Petronikolos Konstantinos
    - Savva Androula

  - Diploma theses in progress (committee member)
    - Andritsou Daphne
    - Diamantis Christos
    - Drakos Vissarios
    - Gegios Nikolaos
    - Gompaki Efstathia
    - Kokkonas Dimitrios
    - Manarolis Xenophon
    - Pappas Nikolaos
    - Psarros Theodoros
    - Siachamis Charalampos
    - Zografos Apostolos

- Diploma theses completed (committee member)
    - Evangeliou Nikolaos
    - Leledakis Dimitrios
    - Leska Valsamo
    - Sidorakis Nikolaos

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Matthias Bucher
**Rank:** Associate Professor
**Years in rank:** 2
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Electronics Laboratory

## A – Teaching

- Undergraduate courses taught
    - ECE 311 – Electronics II (Fall 2015)
    - ECE 416 – Design of CMOS Analog Integrated Circuits (Spring 2016)

- Graduate courses taught
    - ECE 604 – Special Themes of Analog Integrated Circuit Design (Spring 2016)

- Labs taught
    - ECE 311 – Electronics II (Fall 2015)
    - ECE 416 – Design of CMOS Analog Integrated Circuits (Spring 2016)

## B – Publications

- Publications in refereed journals
    - Submitted:
        - N. Mavredakis, N. Makris, P. Habas, **M. Bucher,** "Charge-Based Compact Model for Bias-Dependent Variability of 1/f Noise in MOSFETs", *IEEE Trans. on Electron Devices*
        - K. Zekentes, K. Vassilevski, A. Stavrinidis, G. Konstantinidis, M. Kayambaki, K. Vamvoukakis, E. Vassakis, H. Peyre, N. Makris, **M. Bucher**, P. Schmid, D. Stefanakis, D. Tassis, "Modelling of 4H-SiC VJFETs with self-aligned contacts", *Materials Science Forum*
    - Accepted:
        - R. K. Sharma, C. A. Dimitriadis, **M. Bucher,** "A comprehensive analysis of nanoscale single- and multi-gate MOSFETs", *Microelectronics Journal*

- K. Zekentes, K. Vassilevski, A. Stavrinidis, G. Konstantinidis, M. Kayambaki, K. Vamvoukakis, E. Vassakis, H. Peyre, N. Makris, **M. Bucher**, P. Schmid, D. Stefanakis, D. Tassis, "Modelling of 4H-SiC VJFETs with self-aligned contacts", *Materials Science Forum*

- o Published:
  - R. K. Sharma, C.-A. Dimitriadis, **M. Bucher,** "A comprehensive analysis of nanoscale single- and multi-gate MOSFETs", *Microelectronics Journal,* Vol. 52, Nr. 6, pp. 66-72, June 2016. <u>doi</u>
  - K. Zekentes, K. Vassilevski, A. Stavrinidis, G. Konstantinidis, M. Kayambaki, K. Vamvoukakis, E. Vassakis, H. Peyre, N. Makris, **M. Bucher**, P. Schmid, D. Stefanakis, D. Tassis, "Modelling of 4H-SiC VJFETs with self-aligned contacts", *Materials Science Forum,* Vol. 858, pp. 913-916, May 2016. <u>doi</u>

- o Publications in refereed conferences

  - o K. Zekentes, K. Vassilevski, A. Stavrinidis, G. Konstantinidis, M. Kayambaki, K. Vamvoukakis, E. Vassakis, H. Peyre, N. Makris, **M. Bucher**, P. Schmid, D. Stefanakis, D. Tassis "Modelling of 4H-SiC VJFETs with self-aligned contacts", *Proc. Int. Conf. on Silicon Carbide and Related Materials (ICSCRM)*, Giardini Naxos, Italy, Oct. 4-9, 2015

  - o G. Gyroukis, N. Makris, **M. Bucher**, "On the charge-voltage relationship in multi-gate MOSFET modeling", *Proc. 6th Int. Conf. on Micro-Nanoelectronics, Nanotechnologies and MEMS (Micro&Nano)*, Athens, Greece, Oct. 4-7, 2015

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - o OEDDIR, Organic electronic devices for radiation sensing, Archimedes III Project, Work action 23, Project Nr. 239, Ministry of Education, Duration: 2012 – 2015
- Project proposals submitted:

- Development of Electronics Laboratory infrastructure:
  - o Cadence IC & System software
  - o Keysight ADS and IC-CAP software

# E – Professional service

- Conference Technical Programme Committee service
  - *Organizing Committee Member & TPC Member, Tutorial chairman, 21$^{st}$ European Conference on Silicon Carbide and Related Materials (ECSCRM 2016)*
  - *TPC member, 22$^{nd}$ International Conference on Mixed Design of Integrated Circuits and Systems (MIXDES 2016)*
  - *TPC member, 6$^{th}$ Int. Conf. on Micro-Nanoelectronics, Nanotechnologies and MEMS (MICRO&NANO 2015)*

- Reviewing activities
  - *IEEE Trans. on Electron Devices*
  - *IEEE Electron Device Letters*
  - *European Conf. on Silicon Carbide and Related Materials (ECSCRM) 2016*

# F – Service to the School and the University

- School responsibilities
  - Member of the postgraduate studies committee
  - Member of the committee for the admission of undergraduate students

# G – Advising

- Graduate students supervised
  - Ph.D. theses completed (supervisor):
    - Nikos Mavredakis, Statistical charge-based modelling of low frequency noise in standard and high-voltage (HV-) MOS transistors, May 2016

  - Ph.D. students supervised (supervisor):
    - Nikos Makris, Charge-based modeling of field-effect transistors Enrollment: Dec. 2015

  - M.Sc. theses awarded (supervisor):
    - George Gyroukis, Compact modeling of multi-gate MOSFETs, Dec. 2015
    - Konstantinos Vamvoukakis, On-wafer characterization of SiC VJFETs, Apr. 2016

- o M.Sc. students supervised (supervisor):
    - Konstantinos Kostopoulos, Modelling and characterization of High-Voltage and High-Power FETs, Enrollment: Oct. 2010

- Undergraduate students supervised

    - o Diploma theses completed (supervisor):

    - o Diploma students (supervisor):
        - Diamantis Christos, Characterization of Statistical Variability of Enclosed Gate nMOSFETS
        - Drakos Vissarion (Aris), Characterization of Statistical Variability of Enclosed Gate pMOSFETS
        - Gegios Nicolaos, Analysis of Analog and RF Figures-of-Merit of CMOS Technology
        - Kokkonas Dimitrios, Experimental and analytical study of scaling in advanced CMOS technologies
        - Manarolis Xenophon, Study of Low Frequency Noise in Zero-VT MOS Transistors
        - Nikolaou Aristeidis (Aris), Statistical Analysis of Low Frequency Noise in Enclosed Gate MOSFETS
        - Papadimitriou Angelos, Design optimization of integrated RF CMOS low noise amplifiers
        - Papadopoulou Alexia, Design of a 5GHz Integrated Radio Frequency Power Amplifier in 90nm CMOS Technology
        - Pappas Nikolaos, TCAD investigation of analog properties of multi-gate CMOS transistors

    - o Diploma theses completed (committee member):

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Apostolos Dollas
**Rank:** Professor
**Years in rank:** 15
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Microprocessor and Hardware Laboratory

# A – Teaching

- Undergraduate courses taught
    - COMP 101 : Introduction to the field of ECE (mandatory)
    - ACE 101: Logic Design (mandatory)
    - ACE  203 : Advanced Logic Design (mandatory)
    - ACE 411: Embedded Systems Design
    - ACE 591: Reconfigurable Digital Systems

- Graduate courses taught
    - ACE 613: Reconfigurable Digital Systems
      (Offered jointly with ACE 591)

- Labs taught
    - Supervised the labs of ACE 101
    - Supervised the labs of ACE 203, which were revised with new laboratory exercises for hands-on lab experience with Xilinx Spartan FPGA's.

- Curriculum & course development

    - Lecture notes / slides developed
        - Revised the ACE 203 (Advanced Logic Design) class notes which were distributed in preliminary form through the web-based e-learning environment Webcourses.

# B – Publications

- Publications in refereed journals
  - K. Kalaitzis, E. Sotiriadis, I. Papaefstathiou, A. Dollas "Evaluation of External Memory Access Performance on a High-End FPGA Hybrid Computer", Computation, MDPI Press (accepted for publication).

- Publications in refereed conferences (Published)
  - C. Kritikakis, G. Chrysos, A. Dollas, . N Pnevmatikatos, "An FPGA-based High-Throughput Stream Join Architecture", Proceedings of the 26th International Conference on Field Programmable Logic and Applications (FPL 2016), pp. 1-4, Lausanne, Switzerland, Aug. 29 – Sep. 2, 2016, IEEE Press.
  - A. Nydriotis, P. Malakonakis, N. Pavlakis, G. Chrysos, E. Ioannou, E. Sotiriades, M. Garofalakis, A. Dollas, "Leveraging Reconfigurable Computing in Distributed Real-time Computation Systems", Proceedings of BDPR workshop, co-located at EDBT, France, March, 2016.
  - E. Kousanakis, A. Dollas, E. Sotiriades, I. Papaefstathiou, D. Pnevmatikatos, A. Papoutsi, P. C. Petrantonakis, P. Poirazi, "An Architecture for the Acceleration of the Hodgkin and Huxley Spiking Neural Network Model on the Convey HC-2ex FPGA-Based Processor", 10th HIPEAC Workshop on Reconfigurable Computing (WRC), in conjunction with the HIPEAC 2016 Conference, Prague, Czech Republic, January, 2016.
  - K. Kalaitzis, E. Sotiriadis, I. Papaefstathiou, A. Dollas, "Evaluation of External Memory Access Performance on a High-End Hybrid FPGA Computer", 3rd International Workshop on High-Performance Stencil Computations (HiStencils), in conjunction with the HIPEAC 2016 Conference, Prague, Czech Republic, January 18, 2016 (extended version invited for journal publication after review at MDPI Computation).
  - S. M. Nikolakaki, P. Malakonakis, E. Sotiriades, A. Dollas, I. Papaefstathiou, "Towards Accelerating the LIBSVM Software on the Reconfigurable Maxeler System", 3rd International Workshop on High-Performance Stencil Computations (HiStencils), in conjunction with the HIPEAC 2016 Conference, Prague, Czech Republic, January 18, 2016.

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - Participation in the FP7-ICT-2013 (Scalable Data Analytics Objective) Collaborative STREP Project: "QualiMaster – A Configurable Real-Time Data Processing Infrastructure *Mastering Autonomous Quality Adaptation",* Jan. 2014 – Dec. 2016, Project total funding: 3.7Me, TUC/TSI budget: 915Ke, Project PI

and TUC PI: Prof. Minos Garofalakis. Role: *WP3 and Hardware Team Leader* (WP3 budget: approx. 300Ke)
  - o "COSSIM "A Novel, Comprehensible, Ultra-Fast, Security-Aware CPS Simulator", Founding Source : European Commission, Total Funding : €274.375,00, Duration : Jan. 2015 – Jan. 2018

## E – Professional service

- Conference Technical Program Committee service
  - o Program Committee Member, IEEE/ACM 25th International Symposium on Field Programmable Logic (FPL), London, England, Aug 29 – Sept. 2-4, 2015.
  - o Program Committee Member, 26th IEEE/ACM International Symposium on Field Programmable Logic (FPL), Lausanne, Switzerland, Aug. 29-Sept. 2, 2016.
  - o Program Committee Member, International Conference on Field Programmable Technology (FPT, IEEE Sponsored), Queenstown, New Zealand, December 7-9, 2015.
  - o Programmable Technology (FPT, IEEE Sponsored), Xi'an, China, December 7-9, 2016.
  - o Participation to the ROAD2CPS Spring Clustering Event and presentation of the COSSIM Project, April 14, Vienna, Austria.

*In all the program committees in which I participated, I contributed with reviews of papers (as many as 8 full paper reviews in a single conference), the selection process, organizational issues, and when possible, attendance of the PC meeting. Because my field is rapidly changing, international conferences reflect the state of the art much more than archival journals and I have deliberately given the weight of my reviewing and committee activity on such conferences.*

- Reviewing activities
  - o Several international conferences, including all in which I participate in the program committee and journals, as well as project proposals reviewed for internal state funding in Switzerland.

## F – Service to the School and the University

- School responsibilities
  - o Dean of ECE (since September, 2013)
  - o Ex-officio Chairman of the Dean's Council
  - o Ex-officio member of the ad hoc Undergraduate Studies Committee
  - o Ex-officio member of the ad hoc Graduate Studies Committee
  - o Ex-officio coordinator of Faculty Election Boards for the School of ECE at TUC
  - o Faculty Advisor to the 1st semester students
  - o Member, Undergraduate Studies Committee

- o Member of the Student Placement Committee, supervising the examination in the subject of Logic Design for graduates from other Departments who want to enroll at ECE.
  - o Co-ordination and Organization of an ECE Faculty Retreat, Chania, July 5, 2016.
  - o Member of faculty election boards at the University of Athens.

- University responsibilities
  - o Ex-officio member of the University Senate, TUC
  - o Ex-officio member of the TUC Student Services Committee
  - o Ex-officio member of the TUC Property Development and Exploitation Committee

# G – Advising

- Active graduate students supervised

  - o Ph.D. and M.Sc. students supervised (advisor, completed)
    - Apostolakis Stavros (M.Sc.)

  - o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Malakonakis Pavlos (Ph.D.)
    - Elias Anargyros (M.Sc.)
    - Kalaitzis Konstantinos (M.Sc.)
    - Kousanakis Emmanuel (M.Sc.)
    - Maragoudakis Petros (M.Sc.)
    - Nikoloudakis Georgios (M.Sc.)
    - Rousopoulos Christos (M.Sc.)
    - Smerdis Miltiades (M.Sc.)
    - Veronikis Konstantinos (M.Sc.)

  - o Ph.D. and M.Sc. degrees awarded (committee member)
    - Fysarakis Konstantinos (Ph.D.)
    - Charitopoulos Georgios (M.Sc.)
    - Vatsolakis Charalampos (M.Sc.)

  - o Ph.D. and M.Sc. Degrees (committee member)
    - Brokalakis Andreas (Ph.D.)
    - Chatzivasilis Georgios (Ph.D.)
    - Ioannou Aggelos (Ph.D.)
    - Tabouratzis Nikolaos (Ph.D.)
    - Vatsolakis Charalampos (Ph.D.)
    - Bardis Stamatios (M.Sc.)
    - Galanommatis Ioannis (M.Sc.)
    - Giakoumakis Pavlos (M.Sc.)

- Kartsonakis Ioannis (M.Sc.)
- Malavazos Konstantinos (M.Sc.)
- Mesarchakis Georgios (M.Sc.)
- Miteloudi Konstantina (M.Sc.)
- Perdikakis Apostolos (M.Sc.)
- Savvakos Charalampos (M.Sc.)
- Strataki Eleni (M.Sc.)
- Tsakaneli Stavroula (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Andreopoulos Marios
    - Badogiannis Nikolaos
    - Bozikas Dimitrios
    - Drosopoulos Andreas
    - Fotinopoulos Georgios
    - Iordanou Konstantinos
    - Karandinos Ector
    - Konstantopoulos Konstantinos
    - Kordas Sotiris
    - Kouinis Konstantinos
    - Koukousoulas Pantelis
    - Marinaki Eftichia
    - Michailidis Stavros
    - Politsis Konstantinos
    - Sotiropoulos Antonios
    - Siachamis Charalambos

  - Diploma theses completed (supervisor)
    - Kazantzis Polychronis
    - Kokkoni Theodora
    - Kritikakis Charalabos
    - Melas Christos
    - Mytakis Dimitrios
    - Prokas Nikolaos
    - Spyrou Aggeliki
    - Varsamidis Harisis

  - Diploma theses in progress (committee member)
    - Amourgianos Lorentzos – Vasilios
    - Andronikidis Georgios
    - Athanasiou Vasilios
    - Chondroulis Ioannis

- Demertzis Eleftherios
- Drakoulaki Eleni
- Doithsinis Ioannis
- Grammatopoulos Athanasios – Vasilios
- Iggilis Anastasia
- Katsinelis Konstantinos
- Kitsakis Dimitrios
- Kontos Nikolaos
- Kostarelos Fotios
- Kyriakidis Konstantinos
- Magiropoulos Evangelos
- Myrkos Demosthenes
- Palavras Emmanuel
- Panagidis Giannakis
- Pentafragas Georgios
- Petsas Dimitrios
- Pouli Christina
- Tabakakis Ioannis
- Theodoroglaki Ioanna
- Vatsithianos Nikolaos
- Vogiatzis Konstantinos

- Diploma theses completed (committee member)
    - Alexandris Nikolaos
    - Katsikeas Sotirios
    - Papadopoulou Sofia
    - Pegios Fotios
    - Taxiarhis Vaios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Kostas Kalaitzakis
**Rank:** Professor
**Years in rank:** 13
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Electric Circuits & Renewable Energy Sources

## A – Teaching

- Undergraduate courses taught
    - ACE 202: Electric Circuits Analysis (mandatory)
    - ACE 414 : Electric Measurements and Sensors

- Graduate courses taught
    - ACE 602 : Special Topics on Electric Measurement Systems

- Labs taught
    - ACE 202: Electric Circuits Analysis (mandatory)

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed
        - Presentation for Electric Circuits Analysis (ACE 202), 240 slides
        - Presentation for Electric Measurements and Sensors (ACE 414), 842 slides

    - Authored textbooks

# B – Publications

- Publications in refereed journals
  - o Published:
    - ▪ Tsoutsos T., Tsitoura I., Kokologos D., Kalaitzakis K., "Sustainable Siting Process in Large Wind Farms Case Study in Crete", Renewable Energy, Vol. 75, March 2015, pp. 474-480.
    - ▪ Papantoniou S., Kolokotsa D, Kalaitzakis K., "Building Optimization and Control Algorithms Implemented in Existing BEMS Using a Web Based Energy Management and Control System", Energy and Buildings (Renewable Energy Sources and Healthy Buildings), Vol. 98, 1 July 2015, pp. 45–55.
    - ▪ Tsikalakis A., Routsis D., Pafilis A., Kalaitzakis K., Stavrakakis G., "A Methodology Exploiting Geographical Information Systems to Site a Photovoltaic Park inside a Sustainable Community", Int. J. of Sustainable Energy, Vol. 35, Issue 2, 2016, pp. 132-147.
    - ▪ Papadopoulos A., Tsoutsos T., Frangou M., Kalaitzakis K., Stefanakis N., Boudouvis A. G., "Innovative optics for concentrating photovoltaic/thermal (CPVT) systems - The case of Proteas solar polygeneration system", Int. J. of Sustainable Energy, Oct. 2015, pp. 1-12.
    - ▪ Kolokotsa D., Gobakis K., Papantoniou S., Georgatou C., Kampelis N., Kalaitzakis K., Vasilakopoulou K., Santamouris M., "Development of a Web Based Energy Management System for University Campuses: the CAMP-IT Platform", Int. J. Energy and Buildings, Vol. 123, 1 July 2016, pp. 119–135.
    - ▪ Brellas K., Tsikalakis A., Kalaitzakis K., "Reducing Solar Dish Park Production Volatility Utilizing Lithium-ion Batteries", Period. Polytech. Elec. Eng. Comp. Sci., Vol. 60, No. 4, 2016, pp. 254-260

- Publications in refereed conferences

  - o Published:
    - ▪ Georgatou C., Kolokotsa D., Kalaitzakis K., Papantoniou S., Gombakis K., Kampelis N., Manolis D., Santamouris M., Vasilakopoulou K., "Integrated Smart Indoor-Outdoor Web Based Energy Management System for University Campuses", Proc. Ökosan '15 Conf. on high quality retrofit and redensification with timber construction systems, AEE INTEC, Austria, 17-19 June 2015.
    - ▪ Kampelis N., Gobakis K., Kolokotsa D., Georgatou C., Kalaitzakis K., "Energy Management Optimization in Camp It Infrastructure Based on a Demand Response Perspective", Proc. 5th Int. Conf. on Industrial and Hazardous Waste Management "CRETE 2016", at Chania (Crete, Greece), 27-30 Sept. 2016.

- Books and edited book chapters

- Patents

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - o "Green Partnerships – Local partnerships for greener cities and regions", funded by EE in the framework of Med programme, 2013-2016.
  - o "Smart Grids Energy management Staff MSCA-RISE-2014", Marie Skłodowska - Curie, funded by EE in the framework of "Research and Innovation Staff Exchange" (Horizon RISE), 2015-2019.
  - o "Achieving near Zero and Positive Energy Settlements in Europe using Advanced Energy Technology", H2020-EE-2015-1-PPP, funded by EE, 2015-2019

- Project proposals submitted:

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)

- Reviewing activities

  - o Proposal Reviewer of The Hellenic Foundation for Research and Innovation, Greece

# F – Service to the School and the University

- School responsibilities
  - o Electric Circuits & Renewable Energy Sources Lab, Director

- University responsibilities

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)
    - Brellas Konstantinos (M.Sc.)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Fytraki Evangelia (M.Sc.)
    - Malisovas Athanasios (M.Sc.)

  - Ph.D. and M.Sc. degrees awarded (committee member)
    - Mavredakis Nikolaos (Ph.D.)
    - Blazakis Konstantinos (M.Sc.)
    - Gyroukis Georgios (M.Sc.)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Blazakis Konstantinos (Ph.D.)
    - Mandourarakis Ioannis (Ph.D.)
    - Tsapras Athanasios (Ph.D.)
    - Chatzidakis Panagiotis (M.Sc.)
    - Christeas Dimitrios (M.Sc.)
    - Kladou Anastasia (M.Sc.)
    - Kostopoulos Konstantinos (M.Sc.)
    - Nikolaou Aristides (M.Sc.)
    - Syntzanaki Athena (M.Sc.)
    - Viskadouraki Evangelia (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Aretakis Konstantinos
    - Aronis Spyridon
    - Bitzanakis Joseph
    - Efthimiou Georgios
    - Gentsis Charalampos
    - Kalogridis Stylianos
    - Kostakis Konstantinos
    - Mitrosylis Ioannis
    - Papadimitriou Nikolaos
    - Papanikolaou Marios
    - Parlanis Dimitrios
    - Polomarkaki Sofia
    - Psarros Theodoros

- Psychas Konstantinos
- Sfakianakis Konstantinos
- Smyrneos Dimitrios
- Spyridakis Georgios
- Tzionis Grigorios
- Vardalakis Nikolaos
- Vratsanos Georgios
- Zacharias Panagiotis

o Diploma theses completed (supervisor)
- Achillas Dimitrios
- Andrianopoulos Georgios
- Dalaperas Georgios
- Kantartzis Theodoros
- Klotsonis Alkiviadis
- Leledakis Dimitrios
- Liontiris Andreas
- Marakakis Georgios
- Papantonakis Theodosios
- Psychogios Marios
- Tsaniklidis Georgios

o Diploma theses in progress (committee member)
- Arakadakis Stavros
- Bitirini Maria
- Chalevidis Dimitrios
- Dimitriadis Konstantinos
- Fiorentzis Konstantinos
- Gegios Nikolaos
- Giannopoulos Asimakis
- Gioumatzidis Meletios
- Kitsakis Dimitrios
- Kosmopoulos Stefanos
- Kouloukythas Odysseas
- Lemonis Ioannis
- Margonis Panagiotis – Georgios
- Mellos Alexandros
- Pappas Nikolaos
- Petrakis Emmanuel
- Politis Vasilios
- Sason Nektarios
- Tsokas Vasilios
- Vatsithianos Nikolaos
- Verigou Sofia

- ▪ Vogiatzis Georgios
- ▪ Zografos Apostolos
- ▪ Zorbas Sotirios

- o Diploma theses completed (committee member)
  - ▪ Dousakis Alexandros
  - ▪ Kazantzis Polychronis
  - ▪ Kostopoulos Panagiotis
  - ▪ Symeou Andreas
  - ▪ Tsiamalos Christos
  - ▪ Tzortzis Ioannis

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Eftichios Koutroulis
**Rank:** Associate Professor
**Years in rank:** 1
**Full-time or part-time:** Full – Time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Electric Circuits and Renewable Energy Sources Laboratory

# A – Teaching

- Undergraduate courses taught
    - ACE 102 : Basic Circuit Theory (mandatory)
    - ACE 511: VLSI and ASIC Systems Design

- Graduate courses taught
    - ACE 601: VLSI and ASIC Systems Design
      (Offered jointly with ACE 511)
    - ENE 602: Special Topics on Electronic Energy Management Systems

- Curriculum & course development

    - Lecture notes / slides developed
        - ACE 102 - Basic Circuit Theory: updated the existing slides
        - ACE 511 - VLSI and ASIC Systems Design: updated the existing slides
        - ENE 602 - Special Topics on Electronic Energy Management Systems: updated the existing slides & developed new slides

# B – Publications

- Publications in refereed journals
    - Published:
        - C. Konstantopoulos, E. Koutroulis, N. Mitianoudis and A. Bletsas, "Converting a Plant to a Battery and Wireless Sensor with Scatter Radio and Ultra-Low Cost", *IEEE Transactions on Instrumentation & Measurement*, Vol. 65, No. 2, pp. 388-398, 2016

- A. Paraskevas, E. Koutroulis, "A simple maximum power point tracker for thermoelectric generators", *Energy Conversion and Management*, Vol. 108, pp. 355-365, 2016
- K. Loizou, E. Koutroulis, "Water level sensing: state of the art review and performance evaluation of a low-cost measurement system", *Measurement*, Vol. 89, pp. 204-214, 2016

- Publications in refereed conferences

  - Published:
    - D. Zografos, E. Koutroulis, Y. Yang, F. Blaabjerg, "Minimization of Leakage Ground Current in Transformerless Single-Phase Full-Bridge Photovoltaic Inverters", *17th European Conference on Power Electronics and Applications (EPE-ECCE Europe)*, pp. 1-10, 2015
    - Y. Yang, E. Koutroulis, F. Blaabjerg, "Minimizing the Levelized Cost of Energy in Single-Phase Photovoltaic Systems with a Constant Power Generation Control", *2015 IEEE Energy Conversion Congress and Exposition (ECCE)*, pp. 28-34, 2015

# C – Awards & Distinctions

- ➢ Invitation to serve as Associate Editor of the "Renewable Energy and Environmental Sustainability" journal (publisher: EDP Sciences)
- ➢ Invited talk at the workshop on "Wireless Sensor Node Circuit and System Design" (Wise Design 2015), Aristotle University of Thessaloniki, Dec. 8, 2015

# D – Funded Projects

- Current projects:
  - "AquaNet: Water Management for a City with an Intelligent, Autonomous and Low-cost Wireless Sensor Network", Funding Source: "COOPERATION 2011", General Secretariat of Research and Technology, Budget : € 467.440,00, Duration: Jun. 2013 - Oct. 2015 (extended duration)
  - "DES$^2$iRES: DESign of DESalination systems based on optimal usage of multiple Renewable Energy Sources", ERANETMED "Energy-Water Nexus" call, *project selected for funding*

# E – Professional service

- Associate Editor duties

  - Associate Editor of the "Renewable Energy and Environmental Sustainability" journal (publisher: EDP Sciences)

- o Member of the Editorial Board of the "Renewable Energy" journal (publisher: Elsevier)

- Reviewing activities

  - o Performed 62 reviews of journal papers (including revisions) for:
    - IEEE Transactions on Power Electronics
    - IEEE Journal of Emerging and Selected Topics in Power Electronics
    - IEEE Journal of Photovoltaics
    - IEEE Transactions on Circuits and Systems II
    - IEEE Transactions on Energy Conversion
    - IEEE Transactions on Industrial Electronics
    - Renewable Energy
    - Electric Power Components and Systems
    - Energy and Buildings

# F – Service to the School and the University

- School responsibilities
  - o School coordinator for the ERASMUS+ program
  - o Editing of the postgraduate program guide (in Greek)
  - o Undergraduate studies advisor

# G – Advising

- Active graduate students supervised

  - o Ph.D. and M.Sc. students supervised (advisor, completed)
    - Loizou Constantinos (M.Sc.)

  - o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Mandourarakis Ioannis (Ph.D.)
    - Chatzidakis Panagiotis (M.Sc.)
    - Christeas Dimitrios (M.Sc.)

  - o Ph.D. and M.Sc. degrees awarded (committee member)
    - Angelidakis Angelos (M.Sc.)
    - Dilis Dimitrios (M.Sc.)

  - o Ph.D. and M.Sc. Degrees (committee member)
    - Pantzekos Panagiotis (Ph.D.)
    - Kladou Anastasia (M.Sc.)
    - Malisovas Athanasios (M.Sc.)

- Oikonomakos Panagiotis (M.Sc.)
- Viskadouraki Evangelia (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Chalevidis Dimitrios
    - Dimitriadis Konstantinos
    - Dimitriou Georgios
    - Giannopoulos Asimakis
    - Kosmopoulos Stefanos
    - Koukouzas Christos
    - Petrakis Emmanuel
    - Politis Vasilios
    - Vatsithianos Nikolaos
    - Zorbas Sotirios

  - Diploma theses completed (supervisor)
    - Tzortzis Ioannis

  - Diploma theses in progress (committee member)
    - Kalogridis Stylianos
    - Kokkonas Dimitrios
    - Kostakis Konstantinos
    - Kouloukythas Odysseas
    - Manarolis Xenophon
    - Mitrosylis Ioannis
    - Papadimitriou Nikolaos
    - Sfakianakis Konstantinos
    - Smyrneos Dimitrios
    - Vratsanos Georgios
    - Zacharias Panagiotis

  - Diploma theses completed (committee member)
    - Kokkoni Theodora
    - Vougioukas Georgios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Ioannis Papaefstathiou
**Rank:** Associate Professor
**Years in rank:** 5
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Microprocessor and Hardware Laboratory

# A – Teaching

- Undergraduate courses taught
    - ACE 101: Logic Design (mandatory)
    - ACE 302: Computer Organization (mandatory)
    - COMP 591: Information Systems Security

- Graduate courses taught

- Labs taught

- Curriculum & course development
    - New courses / labs developed
        - I have developed the Information Systems Security's material, exercises and labs

    - Lecture notes / slides developed

    - Authored textbooks

# B – Publications

- Publications in refereed journals

    - Submitted: those published/appeared (see below)

- o Accepted:
    - ▪ N. Tampouratzis, P. Mattheakis, I. Papaefstathiou, "Accelerating Intercommunication in Highly Parallel Systems", ACM Transactions on Architecture and Code Optimization

- o Published:
    - ▪ G. Hatzivasilis, G. Floros, I. Papaefstathiou, C. Manifavas, "Lightweight Authenticated Encryption for Embedded On-Chip Systems", Information Security Journal: A Global Perspective, Taylor & Francis, vol25, issue 4-6, pp 151-161, August 2016
    - ▪ K. Fysarakis, O. Sultatos, C. Manifavas, I. Papaefstathiou, I. Askoxylakis, "XSACd: Cross-domain Resource Sharing & Access Control for Smart Environments", Future Generation Computer Systems, Elsevier, Available online 7 June 2016
    - ▪ G. Hatzivasilis, I. Papaefstathiou and C. Manifavas, "Software Security, Privacy, and Dependability: Metrics and Measurement" IEEE Software, vol. 33, no. 4, pp. 46-54, July-Aug. 2016
    - ▪ Manifavas, C., Hatzivasilis, G., Fysarakis, K., and Papaefstathiou, Y. "A survey of lightweight stream ciphers for embedded systems". Security Comm. Networks, 9: 1226–1246, 2016
    - ▪ K. Fysarakis, D. Mylonakis, C. Manifavas and I. Papaefstathiou, "Node.DPWS: Efficient Web Services for the Internet of Things" IEEE Software, vol. 33, no. 3, pp. 60-67, May-June 2016
    - ▪ K. Fysarakis, G. Hatzivasilis, C. Manifavas and I. Papaefstathiou, "RtVMF: A Secure Real-Time Vehicle Management Framework" IEEE Pervasive Computing, vol. 15, no. 1, pp. 22-30, Jan.-Mar. 2016. **(In top 5 list among all Security papers in 2016 in the MENA region)**
    - ▪ Manifavas, C, Fysarakis, K, Papanikolaou, A, and Papaefstathiou, I, "Embedded Systems Security: A Survey of EU Research Efforts" Security Comm. Networks, 8, 2016–2036, 2015

- ● Publications in refereed conferences

    - o Accepted:

    - o Published:
        - ▪ I. Papaefstathiou, "IoT design course using open-source tools" 2016 IEEE Global Engineering Education Conference (EDUCON), Abu Dhabi, 2016
        - ▪ Iakovos Mavroidis, Ioannis Papaefstathiou, Luciano Lavagno, Dimitrios S. Nikolopoulos, Dirk Koch, John Goodacre, Ioannis Sourdis, Vassilis Papaefstathiou, Marcello Coppola, Manuel Palomino, "ECOSCALE: Reconfigurable computing and runtime system for future exascale

systems" 2016 Design, Automation & Test in Europe Conference & Exhibition (DATE), Dresden, 2016
- ▪ A. Nikitakis, I. Papaefstathiou, K. Makantasis and A. Doulamis, "A novel background subtraction scheme for in-camera acceleration in thermal imagery" 2016 Design, Automation & Test in Europe Conference & Exhibition (DATE), Dresden, 2016
- ▪ A. Nikitakis and I. Papaefstathiou, "Highly efficient reconfigurable parallel graph cuts for embedded vision" 2016 Design, Automation & Test in Europe Conference & Exhibition (DATE), Dresden, Germany, 14-18 March, 2016

- ● Books and edited book chapters

- ● Patents
  - o *GRANTED*

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - o Energy-efficient Heterogeneous Computing at Exascale (ECOSCALE), Information and Communication Technologies European seventh framework, Award Period October 2015 – September 2018, Overall Funding €4.2M, Budget : €770K. Technical Manager
  - o Novel, Comprehensible, Ultra-Fast, Security-Aware CPS Simulator (COSSIM), Information and Communication Technologies H2020, Award Period February 2015 – January 2018, Overall Funding €2.4M, Budget: €470K. Technical Manager

- Project proposals submitted:

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service
  - o IEEE DATE
  - o IEEE CANDAR
  - o IEEE FPL

- Conference Organization (specify role)

- Reviewing activities

## F – Service to the School and the University

- School responsibilities
  - Member of Internal Evaluation Group (Ομάδας Εσωτερικής Αξιολόγησης - OM.E.A.), ECE School
  - Responsible for Co-op, ECE School
  - Member of the Committee for the Restructuring of the Undergraduate Syllabus, ECE School

- University responsibilities
  - Member of Board, Telecommunication Systems Institute
  - Member of Committee for Lifelong Learning, Technical University of Crete

## G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)
    - Fysarakis Konstantinos (Ph.D.)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Brokalakis Andreas (Ph.D.)
    - Chatzivasilis Georgios (Ph.D.)
    - Ioannou Angelos (Ph.D.)
    - Tampouratzis Nikolaos (Ph.D.)
    - Bardis Stamatios (M.Sc.)
    - Giakoumakis Pavlos (M.Sc.)
    - Kartsonakis Ioannis (M.Sc.)
    - Malavazos Konstantinos (M.Sc.)
    - Miteloudi Konstantina (M.Sc.)
    - Pattakos Nikolaos (M.Sc.)
    - Perdikakis Apostolos (M.Sc.)
    - Savvakos Charalampos (M.Sc.)
    - Strataki Eleni (M.Sc.)

  - Ph.D. and M.Sc. degrees awarded (committee member)
    - Apostolakis Stavros (M.Sc.)

- - - Haritopoulos Georgios (M.Sc.)
    - Pentari Anastasia (M.Sc.)
    - Vatsolakis Charalampos (M.Sc.)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Malakonakis Paulos (Ph.D.)
    - Moirogiorgou Constantia (Ph.D.)
    - Vatsolakis Charalampos (Ph.D.)
    - Babalis Charalampos (M.Sc.)
    - Elias Anargyros (M.Sc.)
    - Kalaitzis Konstantinos (M.Sc.)
    - Nikoloudakis Georgios (M.Sc.)
    - Smerdis Miltiades (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Athanasiou Vasilios
    - Chondroulios Ioannis
    - Demertzis Eleftherios
    - Kontos Nikolaos
    - Palavras Emmanuel
    - Panagidis Giannakis
    - Petsas Dimitrios
    - Pogas Nektarios
    - Sourlantzis Sotirios
    - Theodoroglaki Ioanna
    - Vogiatzis Konstantinos

  - Diploma theses completed (supervisor)
    - Alexandris Nikolaos
    - Katsikeas Sotirios
    - Papadopoulou Sofia

  - Diploma theses in progress (committee member)
    - Amourgianos – Lorentzos Vasilios
    - Andreopoulos Marios
    - Andronikidis Georgios
    - Bozikas Dimitrios
    - Drosopoulos Andreas
    - Fotinopoulos Georgios
    - Halevidis Dimitrios
    - Iordanou Konstantinos
    - Karandinos Ector

- Kirakosian Salva
- Kouinis Konstantinos
- Koukounas Angelos – Panagiotis
- Krikorian Arman
- Kyriakidis Konstantinos
- Magiropoulos Evangelos
- Politis Vasilios
- Politsis Konstantinos
- Sotiropoulos Antonios
- Varikos Antonios

- Diploma theses completed (committee member)
  - Melas Christos
  - Pegios Fotios
  - Prokas Nikolaos
  - Spyrou Angeliki
  - Varsamidis Charisis

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Dionisios Pnevmatikatos
**Rank:** Professor
**Years in rank:** 6
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Microprocessor and Hardware Laboratory

## A – Teaching

- Undergraduate courses taught
    - ACE 201: Digital Computers (mandatory)

- Graduate courses taught

- Labs taught

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed

    - Authored textbooks

## B – Publications

- Publications in refereed journals

    - Submitted: those published/appeared (see below)

    - Accepted:

    - Published:
        - G. Passas, M. Katevenis, D. Pnevmatikatos: "The Combined Input-Output Queued Crossbar Architecture for High-Radix On-Chip Switches", IEEE

Micro, vol. 35, no. 6, November-December 2015, pp. 38-47; DOI: 10.1109/MM.2014.56

- Publications in refereed conferences

    o   Accepted:

    o   Published:
        ▪   Catalin Bogdan Ciobanu, Ana Lucia Varbanescu, Dionisios Pnevmatikatos, George Charitopoulos, Xinyu Niu, Wayne Luk, Marco D Santambrogio, Donatella Sciuto, Muhammed Al Kadi, Michael Huebner, Tobias Becker, Georgi Gaydadjiev, Andreas Brokalakis, Antonis Nikitakis, Alex JW Thom, Elias Vansteenkiste, Dirk Stroobandt: "EXTRA: Towards an Efficient Open Platform for Reconfigurable High Performance Computing", IEEE 18th International Conference on Computational Science and Engineering (CSE 2015), 21-23 Oct. 2015, Page(s): 339 - 342, DOI:10.1109/CSE.2015.54
        ▪   George Charitopoulos, Iosif Koidis, Kyprianos Papadimitriou, Dionisios Pnevmatikatos: "Hardware Task Scheduling for Partially Reconfigurable FPGAs", International Symposium on Applied Reconfigurable Computing (ARC), Bochum, Germany, April 2015. Pages 487-498, DOI: 10.1007/978-3-319-16214-0_45"
        ▪   Kostas Katrinis, Dimitris Syrivelis, Dionisios N. Pnevmatikatos, Georgios Zervas, Dimitris Theodoropoulos, Iordanis Koutsopoulos, K. Hasharoni, D. Raho, C. Pinto, F. Espina, Sergio López-Buedo, Q. Chen, Mario Nemirovsky, Damian Roca, H. Klos, T. Berends: Rack-scale disaggregated cloud data centers: The dReDBox project vision. DATE, March 2016: 690-695
        ▪   Dimitris Theodoropoulos, Grigorios Chrysos, Iosif Koidis, George Charitopoulos, Emmanouil Pissadakis, Antonis Varikos, Dionisios N. Pnevmatikatos, Georgios Smaragdos, Christos Strydis, Nikos Zervos: mCluster: A Software Framework for Portable Device-Based Volunteer Computing. CCGrid, May 2016: 336-341.
        ▪   Dirk Stroobandt, Ana Lucia Varbanescu, Catalin Bogdan Ciobanu, Muhammed Al Kadi, Andreas Brokalakis, George Charitopoulos, Tim Todman, Xinyu Niu, Dionisios N. Pnevmatikatos, Amit Kulkarni, Elias Vansteenkiste, Wayne Luk, Marco D. Santambrogio, Donatella Sciuto, Michael Hübner, Tobias Becker, Georgi Gaydadjiev, Antonis Nikitakis, Alex J. W. Thom: EXTRA: Towards the exploitation of eXascale technology for reconfigurable architectures. ReCoSoC, June 2016: 1-7
        ▪   Kostas Katrinis, Georgios Zervas, Dionisios N. Pnevmatikatos, Dimitris Syrivelis, T. Alexoudi, Dimitris Theodoropoulos, D. Raho, C. Pinto, F. Espina, Sergio López-Buedo, Q. Chen, Mario Nemirovsky, Damian Roca, H. Klos, T. Berends: On interconnecting and orchestrating components in

disaggregated data centers: The dReDBox project vision. EuCNC, June 2016: 235-239

▪ Charalabos Kritikakis, Grigorios Chrysos, Apostolos Dollas, Dionisios N. Pnevmatikatos, An FPGA-based high-throughput stream join architecture. In Proceedings, International Conference on Field Programmable Logic and Applications (FPL), Sept 2016: 1-4

▪ Somnath Mazumdar, Eduard Ayguadé, Nicola Bettin, Javier Bueno, Sara Ermini, Antonio Filgueras, Daniel Jiménez-González, Carlos Álvarez-Martinez, Xavier Martorell, Francesco Montefoschi, David Oro, Dionisios N. Pnevmatikatos, Antonio Rizzo, Dimitris Theodoropoulos, Roberto Giorgi, AXIOM: A Hardware-Software Platform for Cyber Physical Systems. DSD, Sept 2016: 539-546

- Books and edited book chapters

- Patents

# C – Awards & Distinctions

➢ "Significant paper" (or test-of-time) award, FPL conference. Paper [C16] was selected among the 27 papers with the most impact from the first 25 years of the FPL conference (number of citations and citations over time). http://www.fpl2015.org/?page=sig_papers

# D – Funded Projects

- Current projects:
  o AXIOM, Agile, eXtensible, fast I/O Module for the cyber-physical era. H2020, Institutional budget: 320K€ Duration: Feb 2015 – Jan 2018.
  o dRedBox, H2020, Project Technical Coordinator and Scientific Coordinator, budget 532K€, Duration Jan 2016-Dec 2018
  o EXTRA, H2020/FET-HPC, Scientific Coordinator, budget 420K€, Duration Sept 2015-Aug 2018

- Project proposals submitted:

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- o DATE, FPL, ICCD, PACET, RAW, RECOFIG, SAMOS
- o ParaFPGA, WRC (workshops)

- Conference Organization (specify role)

- Reviewing activities

  - o IEEE Transactions on Computers, IEEE TRETS, ACM TACO,

  Proposal Evaluation
  - o Canadian National Research Foundation (NSERC),
  - o Artemis
  - o Eurostars

# F – Service to the School and the University

- School responsibilities
  - o PI for the ECE School Practical Training Program

- University responsibilities

# G – Advising

- Active graduate students supervised

  - o Ph.D. and M.Sc. students supervised (advisor, completed)
    - Haritopoulos Georgios (M.Sc.)
    - Vatsolakis Charalampos (M.Sc.)

  - o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Haritopoulos Georgios (Ph.D.)
    - Vatsolakis Charalampos (Ph.D.)
    - Galanommatis Ioannis (M.Sc.)

  - o Ph.D. and M.Sc. degrees awarded (committee member)
    - Fysarakis Konstantinos (Ph.D.)
    - Apostolakis Stavros (M.Sc.)

  - o Ph.D. and M.Sc. Degrees (committee member)
    - Brokalakis Andreas (Ph.D.)
    - Ioannou Angelos (Ph.D.)
    - Tampouratzis Nikolaos (Ph.D.)
    - Elias Anargyros (M.Sc.)

- Kartsonakis Ioannis (M.Sc.)
- Kousanakis Emmanuel (M.Sc.)
- Maragoudakis Petros (M.Sc.)
- Miteloudi Konstantina (M.Sc.)
- Nikoloudakis Georgios (M.Sc.)
- Papathanasiou Athanasios (M.Sc.)
- Pattakos Nikolaos (M.Sc.)
- Perdikakis Apostolos (M.Sc.)
- Rousopoulos Christos (M.Sc.)
- Smerdis Miltiades (M.Sc.)
- Strataki Eleni (M.Sc.)
- Veronikis Konstantinos (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Amourgianos Lorentzos – Vasilios
    - Andronikakis Andreas
    - Andronikidis Georgios
    - Doitsinis Ioannis
    - Drakoulaki Eleni
    - Iggilis Anastasia
    - Katsinelis Konstantinos
    - Koukounas Angelos - Panagiotis
    - Krikorian Arman
    - Kyriakidis Konstantinos
    - Magiropoulos Evangelos
    - Mellos Alexandros
    - Papadakis Orion – Nikolaos
    - Pentafragas Georgios
    - Pouli Christina
    - Tampakakis Ioannis
    - Varikos Antonios

  - Diploma theses completed (supervisor)
    - Gioti Varvara
    - Souris Anastasios
    - Taxiarchis Vaios

  - Diploma theses in progress (committee member)
    - Andreopoulos Marios
    - Bozikas Dimitrios
    - Fotinopoulos Georgios
    - Kouinis Konstantinos

- Koukousoulas Pantelis
- Panagidis Giannakis
- Petsas Dimitrios
- Pogas Nektarios
- Politsis Konstantinos
- Sotiropoulos Antonios
- Theodoroglaki Ioanna

- Diploma theses completed (committee member)
  - Alexandris Nikolaos
  - Evangeliou Nikolaos
  - Kazantzis Polychronis
  - Kritikakis Charalampos
  - Mytakis Dimitrios
  - Petronikolos Konstantinos
  - Symeou Andreas

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** George Stavrakakis
**Rank:** Full Professor
**Years in rank:** 21
**Full-time or part-time:** Full-time
**Division:** Electronics and Computer Architecture
**Lab affiliation:** Electric Circuits & Renewable Energy Sources (www.elci.tuc.gr)

## A – Teaching

- Undergraduate courses taught
    o ENE 301 : Introduction to Power Systems
    o ENE 511 : Renewable Energy Sources

- Graduate courses taught
    o SYS 603 : Advanced Topics in Optimal Control

- Labs taught
    o Introduction to Power Systems (ENE 301)
    o Renewable Energy Sources (ENE 511)

- Curriculum & course development
    o New courses / labs developed already: Introduction to Power Systems (ENE 301)
    o Lecture notes / slides developed already : Renewable Energy Sources (ENE 511)

- Authored textbooks : None

## B – Publications

- Books and edited book chapters with referees: None

- Publications in refereed journals

    o Submitted: three
    o Accepted: two
    o Published: one

- ▪ A.Tsikalakis, D. Routsis, A. Pafilis, K. Kalaitzakis, G. Stavrakakis, "A methodology exploiting geographical information systems to site a photovoltaic park inside a sustainable community", International Journal of Sustainable Energy, Volume 35, Issue 2, 2016.

- Publications in refereed conferences

  - o Submitted : one
  - o Accepted : one
  - o Published : one

    - ▪ Konstantinos Blazakis, Sima Davarzani, Georgios Stavrakakis, Ioana Pisica, "Lessons Learnt from Mining Meter Data of Residential Consumers", DEMSEE'16 11th International Conference on Deregulated Electricity Market Issues in South Eastern Europe 22-23 September 2016, Heraklion, Crete, Greece

- Publications in conferences on abstract review
  - o Submitted : None

- Patents: one in the national level (see below)
  - o GR: Έξυπνη μέθοδος και ολοκληρωμένη ηλεκτρονική διάταξη διαχείρισης πληροφοριών σε συστήματα εξασφάλισης εσωτερικής άνεσης με ταυτόχρονη ενεργειακή διαχείριση κτιρίων. (OBI2004010045)
  EN: Intelligent methodology and integrated electronic device of information processing ensuring the indoor comfort with simultaneous energy management in buildings. (OBI2004010045)

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:
  - o "An integrated system for monitoring ship's emissions and operating parameters with application to optimal management of the ship energy demands during operation [E-GREENSHIP], (2011-2014)", General Secretary Research Technology - ΓΓΕΤ 09ΣΥΝ-51-871, Project site: www.egreensghip.com, Partner

- Project proposals submitted: One

## E – Professional service

- Associate Editor Duties: none

- Society Technical Committee duties: one
  - International Committee of Electrical Machines – ICEM

- Conference Technical Program Committee service: none

- Conference Organization (specify role): none

- Reviewing activities: In six international Journals
  - Permanent invited Reviewer of the Journal of Intelligent and Robotic Systems.
  - Permanent invited Reviewer of the IEEE Transactions on Energy Conversion.
  - Permanent invited Reviewer of the Electric Power Systems Research
  - Reviewer on call basis International Journal of Distributed Sensor Networks
  - Reviewer on call basis Renewable Energy journal
  - Reviewer on call basis IEEE Transactions on Automation Science and Engineering

- Participation in National Committees (e.g., EΔET): one
  - "Permanent Committee of the Prefecture of Crete for the Energy Planning of Crete
- Other

# F – Service to the School and the University

- School responsibilities: none
- University responsibilities: none

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed):
    - Blazakis Constantinos (M.Sc.)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Yotis Thomas (Ph.D.)
    - Blazakis Constantinos (Ph.D.)
    - Kladou Anastasia (M.Sc.)
    - Mesarchakis Georgios (M.Sc.)
    - Syntzanaki Athena (M.Sc.)
    - Viskadouraki Evangelia (M.Sc.)

- o Ph.D. and M.Sc. degrees awarded (committee member)
  - ▪ Vamvoukakis Konstantinos (M.Sc.)

- o Ph.D. and M.Sc. Degrees (committee member)
  - ▪ Mandourarakis Ioannis (PhD)
  - ▪ Tripolitakis Evagelos (PhD)
  - ▪ Bardis Stamatios (M.Sc.)
  - ▪ Brellas Konstantinos (M.Sc.)
  - ▪ Chatzidakis Panagiotis (M.Sc.)
  - ▪ Fytraki Evangelia (M.Sc.)
  - ▪ Xifaras Konstantinos (M.Sc.)

- ● Undergraduate students supervised

  - o Diploma theses completed  (supervisor) :
    - ▪ Fanouraki Irini
    - ▪ Kousanakis Vasilios
    - ▪ Tsiamalos Christos

  - o Diploma theses in progress (supervisor):
    - ▪ Asmargiannakis Petros
    - ▪ Kouloukithas Odisseas
    - ▪ Melagoniti Konstantina
    - ▪ Tsokas Vasilios
    - ▪ Verigou Sophia

  - o Diploma theses completed  (committee member)
    - ▪ Achillas Dimitrios
    - ▪ Papantonakis Theodosios
    - ▪ Psychogios Marios

  - o Diploma theses in progress (committee member):
    - ▪ Aretakis Konstantinos
    - ▪ Aronis Spyridon
    - ▪ Bitzanakis Joseph
    - ▪ Dimitriadis Konstantinos
    - ▪ Drosopoulos Andreas
    - ▪ Gentsis Charalampos
    - ▪ Giannopoulos Asimakis
    - ▪ Kosmopoulos Stefanos
    - ▪ Papanikoalou Marios
    - ▪ Parlanis Dimitrios
    - ▪ Petrakis Emmanuel
    - ▪ Sfakianakis Konstantinos

- Sioutas Apostolos
- Spyridakis Georgios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Aggelos Bletsas
**Rank:** Associate Professor
**Years in rank:** 2,5
**Full-time or part-time:** Full-time
**Division:** Telecommunications
**Lab affiliation:** Telecommunications Laboratory

## A – Teaching

- Undergraduate courses taught
  - TEL 303 : Telecommunication Systems II (mandatory, *24 lectures*)
  - TEL 418: Computer Networks II (*23 lectures*)
- Graduate courses taught
  - TEL 606: Probabilistic Graphical Models (*22 lectures*)

## B – Publications

- Publications in refereed journals
  - Published:
    - S.N. Daskalakis, S.D. Assimonis, E. Kampianakis and **A. Bletsas**, "Soil Moisture Scatter Radio Networking with Low Power", *IEEE Transactions on Microwave Theory and Techniques (TMTT)*, Special Issue on RFID Sensing & Imaging, Vol. 64, No. 7, pp. 2338-2346, July 2016.
    - P.N. Alevizos, Y. Fountzoulas, G.N. Karystinos and **A. Bletsas**, "Log-linear-complexity GLRT-optimal Noncoherent Sequence Detection for Orthogonal and RFID-oriented Modulations", *IEEE Transactions on Communications (TCOM)*, Vol. 64, No. 4, pp. 1600-1612, Apr. 2016. *Conference version received best, conference-wide student paper award and best student paper award in Communications and Networks track, IEEE ICASSP 2015.*
    - S.D. Assimonis, S.N. Daskalakis and **A. Bletsas**, "Sensitive and Efficient RF Harvesting Supply for Batteryless Backscatter Sensor Networks", *IEEE Transactions on Microwave Theory and Techniques (TMTT)*, Vol. 64, No. 4, pp. 1327-1338, Apr. 2016.

- C. Konstantopoulos, E. Koutroulis, N. Mitianoudis and **A. Bletsas**, "Converting a Plant to a Battery and Wireless Sensor with Scatter Radio and Ultra-Low Cost", *IEEE Transactions on Instrumentation & Measurement (IM)*, Vol. 65, No. 2, pp. 388-398, Feb. 2016.
- N. Kargas, F. Mavromatis and **A. Bletsas**, "Fully-Coherent Reader with Commodity SDR for Gen2 FM0 and Computational RFID", *IEEE Wireless Communications Letters (WCL)*, Vol. 4, No. 6, pp. 617-620, Dec. 2015. **Software code available online**, for coherent Gen2 RFID reception and a single RF card with USRP2.

- Publications in refereed conferences
  - Published:
    - Y. Fountzoulas, D. Chachlakis, G.N. Karystinos and **A. Bletsas**, "GLRT-Optimal Blind MSK Detection with Log-Linear Complexity", *23rd International Conference on Telecommunications (ICT)*, May 2016, Thessaloniki, Greece.
    - P.N. Alevizos and **A. Bletsas**, "Scatter Radio Receivers for Extended Range Environmental Sensing WSNs", poster, *IEEE Communication Theory Workshop (CTW)*, May 2016, Nafplio, Greece.
    - G. Vougioukas, S.N. Daskalakis and **A. Bletsas**, "Could Battery-less Scatter Radio Tags Achieve 270-meter Range?", *IEEE Wireless Power Transfer Conference (WPTC)*, May 2016, Aveiro, Portugal.
    - S. Siachalou, **A. Bletsas**, J.N. Sahalos and A. Dimitriou, "RSSI-Based Maximum Likelihood Localization of Passive RFID Tags Using a Mobile Cart", *IEEE Wireless Power Transfer Conference (WPTC)*, May 2016, Aveiro, Portugal.
    - S.N. Daskalakis, A. Georgiadis, **A. Bletsas** and C. Kalialakis, "Dual Band RF Harvesting with Low-Cost Lossy Substrate for Low-Power Supply System", *IEEE European Conference on Antennas and Propagation (EUCAP)*, April 2016, Davos, Switzerland.
    - K. Tountas, P. Alevizos, A. Tzedaki and **A. Bletsas**, "Bistatic Architecture Provides Extended Coverage and System Reliability in Scatter Sensor Networks", *Proc. 5th EURASIP Int. Workshop on RFID Technology (EURFID)*, Oct. 2015, Rosenheim, Germany.

# C – Distinctions

- ➤ Leader of team ASTRAPI winning "Seeding Ideas Harvesting the Future" Technical University of Crete (TUC) 2016 Innovation Contest, July 2016.
- ➤ Proposal "AMPERE: Ambient Intelligence from Ambient Power – An Inference Approach for Future Wireless Sensor Networks" advanced to interview stage, EU/H2020 **ERC** 2016 Consolidator Grant, May 2016.

## D – Funded Projects

- Current projects:
    - 1 Project funded through EU COST Action IC1301 "WIPE".
    - 1 Project funded through GSRT "Proposals Evaluated positively at 3$^{rd}$ **ERC** Call".

- Project proposals submitted:
    - 2 proposals to EU H2020.

## E – Professional service

- Associate Editor duties
    - **Associate Editor *IEEE Transactions on Wireless Communications*.**
    - **Associate Editor *IEEE Wireless Communications Letters*.**

- Conference Technical Program Committee service
    - IEEE ICC 2016 Cognitive Radio & Networks Track (CRN).
    - IEEE ICC 2016 Adhoc & Sensor Networks Track (AHSN).
    - IEEE GLOBECOM 2016 Mobile Wireless Networks (MWN).
    - IEEE GLOBECOM 2016 Adhoc & Sensor Networks Track (AHSN).
    - IEEE GLOBECOM 2016 Cognitive Radio & Networks Track (CRN).

- Conference Organization (specify role)
    - ***2016 IEEE Communications Theory Workshop (CTW)***, Nafplion, Greece, Poster Session co-Chair.

- Reviewing activities
    - Reviewer for various class A IEEE Journals.

## F – Service to the School and the University

- School responsibilities
    - Member of the School of ECE Graduate Studies Committee.

## G – Advising

- M.Sc. students supervised as **principal advisor - COMPLETED Master of Science (M.Sc.) THESES**:

    - M.Sc. Theses supervised (advisor, completed)

- Nikolaos Agadakos, "*Interference Aware Medium Access Control",* **M.Sc**., School of ECE, Technical Univ. of Crete, Oct. 2015.
- Dimitrios Dilis, "*Large Scale Rooftop Networking",* **M.Sc.**, School of ECE, Technical Univ. of Crete, Nov. 2015.
- Spyridon-Nektarios Daskalakis, "*Environmental Scatter Radio Sensors with RF Energy Harvesting*", **M.Sc**., School of ECE, Technical Univ. of Crete, Jul. 2016.
- Konstantinos Tountas, "*Performance Analysis, Middleware & Hardware for Bistatic, Ultra-low Power Scatter Radio Networks*", **M.Sc**., School of ECE, Technical Univ. of Crete, Jul. 2016.

- Diploma theses supervised as **principal advisor – COMPLETED Diploma THESES:**

  o Diploma theses supervised (advisor, completed)

    - Georgios Vougioukas, "*Extended Range Scatter Radio Links with Embedded Radio*", **Diploma Thesis**, School of ECE, Technical Univ. of Crete, Jul. 2016.

- **Ph.D., M.Sc. or Diploma theses advisor**, in progress:
  Various students

- **Ph.D., M.Sc. or Diploma theses committee member**, completed or in progress:
  Various students

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Vassilios Digalakis
**Rank:** Full
**Years in rank:** 16
**Full-time or part-time:** Full-time
**Division:** Telecommunications
**Lab affiliation:** Information & Networks Lab

## A – Teaching

- Undergraduate courses taught
  - TEL 311: Statistical Modeling and Pattern Recognition

## B – Publications

- Publications in refereed journals

  - Published:

- Publications in refereed conferences

  - Published:

- Books and edited book chapters

- Patents

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:

- Project proposals submitted:

# E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)

- Reviewing activities

# F – Service to the School and the University

- School-level responsibilities
  - Information and Networks Lab, Director

- University responsibilities
  - Rector, Technical University of Crete

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)
    - Georgogiannis Alexandros (M.Sc.)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Oikonomidis Dimitrios (Ph.D.)
    - Konstantinidis Konstantinos (M.Sc.)
    - Dougiakis Lazaros (M.Sc.)
    - Georgiadou Despina (M.Sc.)
    - Pechlivanis Konstantinos (M.Sc.)

  - Ph.D. and M.Sc. degrees awarded (committee member)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Georgogiannis Alexandros (Ph.D.)
    - Klasinas Ioannis (Ph.D.)
    - Malandrakis Nikolaos (Ph.D.)
    - Giannoudaki Maria (M.Sc.)
    - Loukeris Nikolaos (M.Sc.)

- ▪ Lourakis Georgios (M.Sc.)

- Undergraduate students supervised

    - o Diploma theses in progress

    - o Diploma theses completed (supervisor)
        - ▪ Sideris Panagiotis

    - o Diploma theses in progress (committee member)
        - ▪ Charitakis Spyridon
        - ▪ Zafiriou Odysseas

    - o Diploma theses completed (committee member)
        - ▪ Fountoulakis Emmanuel

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** George Karystinos
**Rank:** Associate Professor
**Years in rank:** 4
**Full-time or part-time:** Full-time
**Division:** Telecommunications
**Lab affiliation:** Telecommunications Laboratory

# A – Teaching

- Undergraduate courses taught
    - TEL 201 : Signals and Systems (mandatory)
    - TEL 415 : Statistical Signal Processing for Communications
    - TEL 416 : Information Theory and Coding

- Graduate courses taught

- Labs taught

- Curriculum & course development
    - New courses / labs developed
    - Lecture notes / slides developed
    - Authored textbooks

# B – Publications

- Publications in refereed journals

    - Submitted:
        - P. N. Alevizos, A. Bletsas, and **G. N. Karystinos**, "Noncoherent short packet detection and decoding for scatter radio sensor networking," IEEE Transactions on Communications, submitted Aug. 2016.

    - Accepted: those published (see below)

- o Published:
  - P. N. Alevizos, Y. Fountzoulas, **G. N. Karystinos**, and A. Bletsas, "Log-linear-complexity GLRT-optimal noncoherent sequence detection for orthogonal and RFID-oriented modulations," IEEE Transactions on Communications, vol. 64, pp. 1600-1612, Apr. 2016.

- Publications in refereed conferences

  - o Submitted: those accepted or published (see below)

  - o Accepted: those published (see below), plus
    - M. Gkizeli and **G. N. Karystinos**, "Polynomial-complexity GLRT-optimal noncoherent PNC," IEEE ISWCS 2016 - International Symposium on Wireless Communication Systems, Poznan, Poland, accepted June 2016.
    - P. P. Markopoulos, N. Tsagkarakis, D. A. Pados, and **G. N. Karystinos**, "Direction-of-arrival estimation by L1-norm principal components," IEEE PHASED ARRAY 2016 - International Symposium on Phased Array Systems and Technology (PAST), Boston, MA, accepted Mar. 2016.

  - o Published:
    - Y. Fountzoulas, D. Chachlakis, **G. N. Karystinos**, and A. Bletsas, "GLRT-optimal blind MSK detection with log-linear complexity," in Proc. IEEE ICT 2016 - International Conference on Telecommunications, Thessaloniki, Greece, May 2016.
    - Y. Fountzoulas, A. Kosta, and **G. N. Karystinos**, "Polar-code-based security on the BSC-modeled HARQ in fading," in Proc. IEEE ICT 2016 - International Conference on Telecommunications, Thessaloniki, Greece, May 2016.
    - Y. Fountzoulas and **G. N. Karystinos**, "Optimal blind APSK detection in polynomial time," in Proc. IEEE VTC 2015 Fall - Vehicular Technology Conference, Boston, MA, Sept. 2015.

- Books and edited book chapters

- Patents

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:
  - o *"Distributed Wireless Communications,"* Funding Source: National Strategic Reference Framework (NSRF 2007 - 2013), Sectoral Operational Programmes,

Education and Lifelong Learning, Budget: € 539.959,47, Duration: Jan. 1, 2012 - Dec. 31, 2015.

- Project proposals submitted:
    - *"Plasma Antenna Technologies,"* Funding Source: European Commission, Horizon 2020 Program, submitted Apr. 2016.

## E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service
    - IEEE Wireless Communications and Networking Conference 2016 (IEEE WCNC 2016).
    - IEEE International Conference on Telecommunications 2016 (IEEE ICT 2016).

- Conference Organization (specify role)

- Reviewing activities

## F – Service to the School and the University

- School – level responsibilities
    - Director of Graduate Studies, School of Electronic and Computer Engineering, Technical University of Crete, 2016 - present.
    - Undergraduate Studies Committee, School of Electronic and Computer Engineering, Technical University of Crete, 2013 - present.

- University responsibilities
    - Member of the Board of Directors, Property Development and Management Company, Technical University of Crete, 2015 - present.

## G – Advising

- Active graduate students supervised

    - Ph.D. and M.Sc. students supervised (advisor, completed)

    - Ph.D. and M.Sc. students supervised (advisor, in progress)
        - Fountzoulas Ioannis (Ph.D.)
        - Koupatsiaris Dimitrios (Ph.D.)

- Ph.D. and M.Sc. degrees awarded (committee member)
  - Agadakos Nikolaos (M.Sc.)
  - Kargas Nikolaos (M.Sc.)

- Ph.D. and M.Sc. Degrees (committee member)
  - Alevizos Panagiotis (Ph.D.)
  - Giotis Thomas (Ph.D.)
  - Lourakis Georgios (M.Sc)
  - Oikonomakos Panagiotis (M.Sc)
  - Psaromanolakis Nikolaos (M.Sc)

- Undergraduate students supervised

  - Diploma theses in progress
    - Dafoulis Nikolaos
    - Theofilou Eleni
    - Zafiriou Odysseas

  - Diploma theses completed (supervisor)
    - Fountoulakis Emmanuel
    - Hahlakis Dimitrios
    - Papoutsidakis Ioannis – Themistoklis

  - Diploma theses in progress (committee member)
    - Fragakis Panteleimon
    - Karakasis Paris
    - Lykoudis Georgios
    - Papakonstantinou Triantaphyllos
    - Tsetis Ioannis
    - Vestakis Marios

  - Diploma theses completed (committee member)
    - Georgiopoulos Theodoros
    - Giolias Athanasios
    - Karamolegos Nikolaos
    - Pezoulas Vasilios
    - Vougioukas Georgios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Polychronis Koutsakis
**Rank:** Associate Professor
**Years in rank:** 2 1/2
**Full-time or part-time:** Full – time
**Division:** Telecommunications
**Lab affiliation:** Information & Networks Laboratory

## A – Teaching

- Undergraduate courses taught
  - TEL 401: Computer Networks I

- Graduate courses taught

- Curriculum & course development
  - New courses / labs developed

  - Lecture notes / slides developed

  - Authored textbooks

## B – Publications

- Publications in refereed journals

  - Published:
    - G. Athanasopoulou and P. Koutsakis, "eMatch: An Android Application for Finding Friends in your Location", Mobile Information Systems, Vol. 2015, Article ID 463791

- Publications in refereed conferences

- Books and edited book chapters

- Patents

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:
    - o "SpeDial: Spoken Dialogue Analytics", Funding Source: FP7-ICT (ICT-SME-DCA STREP Call 2013), Project Budget: € 1,500,000, TUC Budget: € 110,000, Duration: Dec. 1, 2013 - Nov. 30, 2015, Role: Deputy Co-ordinator of the project and Technical Leader of the Technical University of Crete group. Project funded under the, Budget: 1.5 million €.

## E – Professional service

- Associate Editor duties
    - o IEEE Communications Surveys & Tutorials
        - ▪ Computer Communications

- Conference Technical Program Committee service
    - o IEEE ICC
    - o IEEE GLOBECOM
    - o IEEE WCNC
    - o IEEE VTC-fall
    - o IEEE WoWMoM
    - o IEEE WiMob
    - o IEEE IWCMC

## G – Advising

- Active graduate students supervised

    - o Ph.D. and M.Sc. students supervised (advisor, completed)

    - o Ph.D. and M.Sc. students supervised (advisor, in progress)
        - ▪ Klasinas Ioannis (Ph.D.)
        - ▪ Chorianopoulou Arodami (M.Sc.)
        - ▪ Kalabogia Athena (M.Sc.)
        - ▪ Loizidis Orestis – Stavros (M.Sc.)

    - o Ph.D. and M.Sc. degrees awarded (committee member)
        - ▪ Georgiladakis Spyridon (M.Sc.)
        - ▪ Theodorou Maria (M.Sc.)

- o Ph.D. and M.Sc. Degrees (committee member)

- ● Undergraduate students supervised

  - o Diploma theses in progress
    - ▪ Tsakalakis Georgios

  - o Diploma theses completed (supervisor)
    - ▪ Kastrinakis Marios
    - ▪ Theodosiou Nikolas

  - o Diploma theses in progress (committee member)
    - ▪ Tampakakis Ioannis

  - o Diploma theses completed (committee member)
    - ▪ Kyriazis Athanasios
    - ▪ Didymiotis – Ventouris Georgios
    - ▪ Psaromanolakis Nikolaos
    - ▪ Tzimas Dimitrios
    - ▪ Vlachantonis Georgios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Athanasios P. Liavas
**Rank:** Professor
**Years in rank:** 7
**Full-time or part-time:** Full-time
**Division:** Telecommunications Division
**Lab affiliation:** Telecommunications Lab, Director

## A – Teaching

- Undergraduate courses taught
  - TEL 301: Telecommunications Systems I (mandatory)
  - TEL 413: Convex Optimization (Offered jointly with TEL 609)

- Graduate courses taught
  - TEL 609: Convex Optimization
  - TEL 615: Special Topics in Convex Optimization

- Labs taught
  - Special Topics in Convex Optimization (Matlab implementation of advanced convex optimization algorithms)

- Curriculum & course development

  - New courses / labs developed

  - Lecture notes / slides developed
    - Convex Optimization (updated electronic notes)

  - Authored textbooks

## B – Publications

- Publications in refereed journals

  - Submitted

- A. P. Liavas, G. Kostoulas, G. Lourakis, K. Huang and N. D. Sidiropoulos, "Nesterov-based parallel algorithm for large-scale non-negative tensor factorization," submitted to the IEEE Transactions on Signal Processing (July 2016).

  - Accepted:
    - K. Huang, N. D. Sidiropoulos, and A. P. Liavas, "A flexible and efficient algorithmic framework for constrained matrix and tensor factorization," accepted to the IEEE Transactions on Signal Processing (August 2016).

  - Published:

- Publications in refereed conferences

  - Accepted:

  - Published:
    - K. Huang, N. D. Sidiropoulos, and A. P. Liavas, "Efficient algorithms for "universally" constrained matrix and tensor factorization," 23rd EUSIPCO, 31 August - 4 September, Nice, France.

- Books and edited book chapters

- Patents

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:

- Project proposals submitted:

## E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)

- Reviewing activities
  - IEEE Transactions on Signal Processing, IEEE ICASSP

## F – Service to the School and the University

- University responsibilities

- School responsibilities
  - Member of the Board, Telecommunication Systems Research Institute (T.S.I.), Technical University of Crete

## G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)
    - (None)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Georgogiannis Alexandros (Ph.D.)
    - Iliadis Stylianos (M.Sc.)
    - Lourakis Georgios (M.Sc.)

  - Ph.D. and M.Sc. degrees awarded (committee member)
    - Georgogiannis Alexandros (M.Sc.)
    - Theodorou Maria (M.Sc.)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Alevizos Panagiotis (Ph.D.)
    - Koupatsiaris Dimitrios (Ph.D.)
    - Moutzianou Georgios (Ph.D.)
    - Dougiakis Lazaros (M.Sc.)
    - Orphanoudakis Emmanuel (M.Sc.)
    - Pechlivanis Konstantinos (M.Sc.)
    - Sklivanitis Georgios (M.Sc.)
    - Tsakaneli Stavroula (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Charitakis Spyridon
    - Karakasis Paris
    - Lykoudis Georgios

- Papakonstantinou Triantafyllos

- Diploma theses completed (supervisor)
  - Georgiopoulos Theodoros
  - Giolias Athanasios
  - Karamolegos Nikolaos

- Diploma theses in progress (committee member)
  - Amiridi Magda
  - Antoniou Eleni
  - Charitakis Spyridon
  - Chondroulis Ioannis
  - Dafoulis Nikolaos
  - Delis Georgios
  - Nasoulis Nikolaos
  - Petrou Eleni
  - Tsitsikas Georgios

- Diploma theses completed (committee member)
  - Bouzoukas Dimitrios
  - Markopoulos Alexandros
  - Papoutsidakis Ioannis – Themistoklis
  - Psaromanolakis Nikolaos
  - Vlahantonis Georgios

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Michael Paterakis
**Rank:** Professor
**Years in rank:** 17
**Full-time or part-time:** Full-time
**Division:** Telecommunications
**Lab affiliation:** Information and Computer Networks Laboratory

## A – Teaching

- Undergraduate courses taught
    - o TEL 202: Probability and Random Signals (Mandatory)
    - o TEL 512: Introduction to Modeling and Performance Evaluation of Computer Communication Networks

- Graduate courses taught
    - o TEL 611: Introduction to Modeling and Performance Evaluation of Computer Communication Networks, Graduate Course (Offered jointly with TEL 512)

## B – Publications

- Publications in refereed conferences

    - o M. Theodorou and M. Paterakis, "Design and Performance Evaluation of a Distributed Algorithm for Heterogeneous Multichannel CRNs", accepted for publication in the Proceedings of the 12th International Wireless Communications and Mobile Computing Conference (IWCMC 2016)

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:
    - o "Social Network Aware Cognitive Radio Networks – SoCoNet", funded by the GSRT Thales Program. This project is a collaborative effort of research teams

from AUTH (ECE Dept.), TUC (ECE School) and UTH (CET Dept.). Prof. M. Paterakis participates in the research team. Coordinator: Prof. Leonidas Georgiadis, ECE Dept., AUTH. Funded for the period 1/4/2012 - 30/9/2015. Total budget: € 521.738

o Independent Auditor for the Project: "Development of Broadband Infrastructure on Rural "White" Areas of Greek Territory and Operations Services – Development of Infrastructure", Public Private Partnerships Project. Funded for the period 1/1/2015 – 31/12/2031 by the special purpose entities "OTE Rural North" and "OTE Rural South". Budget: € 1.448.540

# E – Professional Service

- *June 2016 – June 2019.* Member of the Executive Board, Greek Universities Network (GUnet), a no-profit company founded by all the Greek Academic Institutions.

# F – Service to the School and the University

- School responsibilities
  2013 - , Member, Graduate Committee, ECE School, Technical University of Crete

- University responsibilities
  o June 2013 – , Director, Telecommunication Systems Research Institute (T.S.I.), Technical University of Crete.
  o 2013 - , Member of the Quality Assurance Unit for Higher Education, Technical University of Crete.

# G – Advising

- Active graduate students supervised

  o Ph.D. and M.Sc. students supervised (advisor, completed)
    ▪ Theodorou Maria (M.Sc.)

  o Ph.D. and M.Sc. Degrees (committee member)
    ▪ Alevizos Panagiotis (Ph.D.)
    ▪ Kalampogia Athena (M.Sc.)
    ▪ Loizidis Orestis – Stavros (M.Sc.)
    ▪ Pechlivanis Konstantinos (M.Sc.)
    ▪ Psaromanolakis Nikolaos (M.Sc.)

- Undergraduate students supervised

  o Diploma Theses completed (supervisor):
    ▪ Bouzoukas Dimitrios, Thesis Title: "Random Multiple Access with Channel Sensing for an Energy Limited Cognitive Radio System".
    ▪ Kyriazis Athanasios, Thesis Title: "Cache Management Policies for Streaming Proxies: the cases of fixed and variable video sizes and collaboration among proxies".
    ▪ Markopoulos Alexandros, Thesis Title: "Caching for on Demand IPTV services".
    ▪ Psaromanolakis Nikolaos, Thesis Title: "Channel Sensing Algorithms for Coginitive Radio Networks".
    ▪ Vlachantonis Georgios, Thesis Title: "Medium Access Protocols based on Opportunistic Transmissions in Wireless Multichannel Cognitive Networks".

  o Diploma Theses completed (committee member):
    ▪ Giolias Athanasios
    ▪ Karamolegos Nektarios
    ▪ Kastrinakis Marios
    ▪ Theodosiou Nikolas

  o Diploma Theses in progress (committee member):
    ▪ Michailidis Stavros
    ▪ Papakonstantinou Triantaphyllos
    ▪ Tsakalakis Georgios
    ▪ Tsetis Ioannis

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Michael Zervakis
**Rank:** Professor
**Years in rank:** 16
**Full-time or part-time:** Full-time
**Division:** Telecommunications
**Lab affiliation:**      1. Digital Image and Signal Processing Lab
                      2. Lab of Automation

# A – Teaching

- Undergraduate courses taught
    - TEL 302: Digital Signal Processing (mandatory)
    - TEL 312: Digital Image Processing
    - ACE 513: Biomedical Technology

- Graduate courses taught
    - TEL 610: Special Topics in Digital Image Processing

- Labs taught
    - Digital Signal Processing – Lab supervision

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed
        - Biomedical Technology – Development of notes on Biomedical Signal Analysis

    - Authored textbooks

# B – Publications

- I. Articles in Journals
    - L. Koumakis, K. Sigdel, G. Potamias, S. Sfakianakis, J. van Leeuwen, G. Zacharioudakis, V. Moustakis, M. Zervakis, A. Bucur, K. Marias, N. Graf and M.

Tsiknakis, "Bridging miRNAs and pathway analysis in clinical decision support; a case study in nephroblastoma", Network Modeling Analysis in Health Informatics and Bioinformatics. December 2015, 4:30 doi: 10.1007/s13721-015-0102-5

- o Konstantinos Karalas, Grigorios Tsagkatakis, Michalis Zervakis, and Panagiotis Tsakalides, "Land Classification Using Remotely Sensed Data: Going Multi-Label", IEEE Transactions on Geoscience and Remote Sensing, Vol:54, No. 6, pp: 3548 – 3563, June 2016 doi: 10.1109/TGRS.2016.2520203
- o Konstantinos C. Tsolis, Eleni Bagli, Katerina Kanaki, Sofia Zografou, Sebastien Carpentier, Ekaterini S. Bei, Savvas Christoforidis, Michalis Zervakis, Carol Murphy, Theodore Fotsis, and Anastassios Economou, "Proteome Changes during Transition from Human Embryonic to Vascular Progenitor Cells", J. Proteome Res., 2016, 15 (6), pp 1995–2007, doi: 10.1021/acs.jproteome.6b00180
- o Marios Antonakakis, Stavros I. Dimitriadis, Michalis Zervakis, Sifis Micheloyannis, Roozbeh Rezaie, Abbas Babajani-Feremi, George Zouridakis, Andrew C. Papanicolaou, "Altered cross-frequency coupling in resting-state MEG after mild traumatic brain injury", International Journal of Psychophysiology, 102: 1-11, April 2016 doi:10.1016/j.ijpsycho.2016.02.002
- o Antonakakis, M., M. Zervakis, C.E.M. van Beijsterveldt, D.I. Boomsma, E.J.C. De Geus, S. Micheloyannis, and D.J.A. Smit. 2016. "Genetic Effects on Source Level Evoked and Induced Oscillatory Brain Responses in a Visual Oddball Task." Biological Psychology 114: 69–80, Feb. 2016 doi:10.1016/j.biopsycho.2015.12.006
- o N.-K. Chlis, E.S. Bei, and M. Zervakis, "Introducing a Stable Bootstrap Validation Framework for Reliable Genomic Signature Extraction". IEEE/ACM Trans. On Computational Biology and Bioinformatics, conditionally accepted, under 2nd review since Aug. 2016

- II. ARTICLES IN BOOK CHAPTERS

- III. ARTICLES IN CONFERENCE PROCEEDINGS
  - o Konstantia Moirogiorgou, Sofia Nerantzaki, Giorgos Livanos, Marios Antonakakis, Nikolaos P. Nikolaidis, Euripides G.M. Petrakis, Andreas E. Savakis, George Giakos and Michalis Zervakis, "Color characteristics for the evaluation of suspended sediments", IEEE-IST International Conference 2015, September 16-18, 2015 | Macau, China
  - o Giorgos Livanos, Konstantia Moirogiorgou, Marios Antonakakis, Michalis Zervakis, Euripides G.M. Petrakis, George Giakos and Suman Shrestha, "Lung Tissue Evaluation Detecting and Measuring Morphological Characteristics of Cell Regions", IEEE-IST International Conference 2015, September 16-18, 2015 | Macau, China
  - o George C Giakos, Stefanie Marotta, Suman Shrestha, Aditi Deshpande, Tannaz Farrahi, Lin Zhang, A. Blinzler, Tri Quang, Ying Na, George Livanos, Michalis Zervakis, Sarhan M. Musa, "Bioinformatics of Lung Cancer",  Imaging Systems

and Techniques (IST), 2015 IEEE International Conference, Macau, China, 16-18 Sept. 2015

o Ioanna Vourlaki, George Livanos, Michalis Zervakis, George C Giakos, Costas Balas, "Self-Organization of Dynamic Spectral Imaging Data Based on Bootstrapping and Clustering Approaches", Imaging Systems and Techniques (IST), 2015 IEEE International Conference, Macau, China, 16-18 Sept. 2015

o George Livanos, Michalis Zervakis, George C Giakos, Nikos Pasadakis, "Application of Non-Negative Matrix Factorization for the Deconvolution of Petroleum Mixtures Using Mid FTIR Analysis",Imaging Systems and Techniques (IST), 2015 IEEE International Conference, Macau, China, 16-18 Sept. 2015

o Papadopoulos, A., Tsiouris, K., Pappas, I., Zervakis, M., Koutsouris, D., Exarchos, T.,Fotiadis, D."Design and implementation of processes for the primary care in the healthcare system of Greece". In Proceedings of the 15th IEEE International Conference on BioInformatics and BioEngineering (BIBE 2015), DOI: 10.1109/BIBE.2015.7367717

o Konstantinos Karalas, Grigorios Tsagkatakis, Michalis Zervakis, Panagiotis Tsakalides, "Deep learning for multi-label land cover classification", Proc. SPIE 9643, Image and Signal Processing for Remote Sensing XXI, 96430Q (October 15, 2015); doi:10.1117/12.2195082

o Ragia, L., Paravolidakis, V., Moirogiorgou, K., Zervakis, M. "Automated waterline extraction for optimal land use a case study in Crete", (2016) GISTAM 2016 - Proceedings of the 2nd International Conference on Geographical Information Systems Theory, Applications and Management, pp. 99-104.

o S. Sfakianakis, E.S. Bei, M. Zervakis, "Stacking of Network Based Classifiers with Application in Breast Cancer Classification", XIV Med Conference on Medical and Biological Engineering and Computing-MEDICON 2016, Volume 57 of IFMBE Proceedings, pp 1079-1084

o S. Tsakaneli, E.S. Bei, M. Zervakis, "Comparing Genomic Network Methodologies: A Combined Approach for Cancer Prognosis", XIV Med Conference on Medical and Biological Engineering and Computing-MEDICON 2016, Volume 57 of . IFMBE Proceedings, pp 506-511

o E.E. Tripoliti, M. Zervakis, D.I. Fotiadis, "Multiple Kernel Learning Algorithms and Their Use in Biomedical Informatics", XIV Med Conference on Medical and Biological Engineering and Computing-MEDICON 2016, Volume 57 of IFMBE Proceedings, pp 553-558.

o V. Leska, E.S. Bei, E. Petrakis, M. Zervakis, "Gene Expression Data Analysis for Classification of Bipolar Disorders", XIV Med Conference on Medical and Biological Engineering and Computing-MEDICON 2016, Volume 57 of IFMBE Proceedings, pp 494-500

o V. Paravolidakis, K. Moirogiorgou, L. Ragia, M. Zervakis, C. Synolakis, "Coastline Extraction from Aerial Images based on Edge Detection", ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume III-8, 2016 XXIII ISPRS Congress, 12–19 July 2016, Prague, Czech Republic

- Patents

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - *"OncoSeed Diagnostics : Biology of Circulating Tumour Cells, Distant Metastasis & Development of Liquid Biopsy Methods"*, Funding Source : National Strategic Reference Framework (NSRF 2007 - 2013), Sectoral Operational Programmes, Operational Program Competitiveness & Entrepreneurship, "COOPERATION" – SUB ACTION II : Large Scale Cooperative Projects, Budget : € 101.750,00, Duration : Dec. 2010 – Dec. 2015

- Project proposals submitted:
  - TRITON: submitted under H2020- HOME/2015/ISFB/AG/ESUR
  - HOPE: submitted under H2020-SCI-201602017
  - SKOFIN: Strategic Cooperation on Fostering Innovation at IT Related Departments & Pilot Innovative Courses: submitted under ERASMUS+ Strategic Partnerships
  - ESCALATING: Enhancing and TranSforming Chronic DiseAse (SeLf) ManAgement Towards INteGrated Care: submitted under Marie Skłodowska-Curie
  - ΑιγαιοΓλάρος: submitted Interreg V-A Ελλάδα Κύπρος 2014-2020, call 1
  - eCrisis: submitted Interreg V-A Ελλάδα Κύπρος 2014-2020, call 1
  - Hrofilos: submitted Interreg V-A Ελλάδα Κύπρος 2014-2020, call 1
  - ΝΗΡΗΙΣ: submitted Interreg V-A Ελλάδα Κύπρος 2014-2020, call 1
  - ΘΕΡΑΠΩΝ: submitted Interreg V-A Ελλάδα Κύπρος 2014-2020, call 1

# E – Professional service

- Associate Editor duties
  - Guest Editor, Journal of Biomedical Signal Processing and Control, Special Issue on "Biomedical Imaging Systems", 2017
    https://www.journals.elsevier.com/biomedical-signal-processing-and-control/call-for-papers/special-issue-on-biomedical-imaging-systems
  - Guest Editor, Journal Multimedia Tools and Applications, Special Issue on "Multimedia Systems for Critical Engineering Applications", 2017
    http://static.springer.com/sgw/documents/1597858/application/pdf/Full+Call+Special+Issue+of+MTAP.pdf
  - Guest Editor, Measurement Science and Technology journal, Special Issue on "Imaging Systems and Techniques", 2017
    http://iopscience.iop.org/journal/0957-0233

- Society Technical Committee duties

- Conference Technical Program Committee service
    - Co-Chair, and Steering Committee member, 2015 IEEE Intl Conference on Imaging Systems and Techniques, Sept.16-18 Macau, China
    http://ist2015.ieee-ims.org/

- Conference Organization (specify role)
    - Local Chair, and Steering Committee member, 2016 IEEE Intl Conference on Imaging Systems and Techniques, Oct.4-5, Chania, Greece
    http://ist2016.ieee-ims.org/
- Reviewing activities
    - Journals: Biomedical Signal Processing and Control, IEEE Transactions on Biomedical and Health Informatics
    - Conferences: IEEE EMBC 2016, HealthCom 2016
    - Project Reviewer: "Tracing the origin of functional innovation in a complex regulatory network: the evolution of a new module in the immune system of Drosophila" for the Netherlands Organisation for Scientific Research, May 2016
    - Project Reviewer: "Neurominer: unveiling hidden patterns in neuro-imaging data" for the Masaryk University Project Committee P08 - Biomedical technology

# F – Service to the School and the University

- School responsibilities
    - Member and Vice-Dean of ECE School
    - Digital Image and Signal Processing Laboratory, Director
    - Automation Laboratory, Director

- University responsibilities
    - Member and Vice-chair  ELKE
    - Member of the Senate, TUC

# G – Advising

Undergraduate students supervised

- Active graduate students supervised

    - Ph.D. and M.Sc. students supervised (advisor, completed)
        - Antonakakis Marios (M.Sc.)
        - Karalas Constantinos (M.Sc.)
        - Pentari Anastasia (M.Sc.)

- o Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Liaba Irini (Ph.D.)
    - Livanos Georgios (Ph.D.)
    - Mirogiorgou Constantia (Ph.D.)
    - Feigler Igor (M.Sc.)
    - Jaohar Osman (M.Sc.)
    - Pezoulas Vasilios (M.Sc.)
    - Tsakaneli Stavroula (M.Sc.)
    - Xifaras Constantinos (M.Sc.)

- o Ph.D. and M.Sc. degrees awarded (committee member)
    - Koulieris Georgios Alexandros (Ph.D.)
    - Blazakis Constantinos (M.Sc.)

- o Ph.D. and M.Sc. Degrees (committee member)
    - Chliaoutakis Angelos (Ph.D.)
    - Kalantzaki Calliope (Ph.D.)
    - Oikonomidis Dimitrios (Ph.D.)
    - Tsapras Athanasios (Ph.D.)
    - Christeas Dimitrios  (M.Sc.)
    - Epitropou Giorgos (M.Sc.)
    - Kalokyri Varvara  (M.Sc.)
    - Kastrinakis Marios  (M.Sc.)
    - Rousopoulos Christos  (M.Sc.)
    - Thermolia Chryso (M.Sc.)

- Undergraduate students supervised

    - o Diploma theses in progress
        - Andritsou Daphne
        - Barberakis Stylianos
        - Gompaki Efstathia
        - Kirakosian Salva
        - Koulountzios Panagiotis
        - Lemonis Ioannis
        - Markolefas Filippos
        - Paravolidakis Vasilios
        - Petrou Eleni
        - Politis Marios

    - o Diploma theses completed (supervisor)
        - Leska Valsamo
        - Pezoulas Vasilios
        - Tsakaneli Stavroula

- Diploma theses in progress (committee member)
  - Asmargiannakis Petros
  - Boras Charalampos
  - Bousias Dimitrios
  - Demertzis Eleftherios
  - Karakasis Paris
  - Katsinelis Konstantinos
  - Kontos Nikolaos
  - Marinaki Eftichia
  - Melagoniti Konstantina
  - Mellos Alexandos
  - Pentafragas Georgios
  - Siahamis Charalampos
  - Vogiatzis Konstantinos

- Diploma theses completed (committee member)
  - Fanouraki Irini
  - Gotsoulias Dimitrios
  - Papadopoulou Sofia
  - Savva Androula
  - Spyrou Angeliki
  - Varsamidis Harissis

**Name:** Dimitris Angelakis
**Rank:** Assistant Professor
**Years in rank:** 4
**Full-time or part-time:** Full-time
**Division:**
**Lab affiliation:**

## A – Teaching

- Undergraduate courses taught
    - FYS 102: Physics (Electromagnetism)
    - FYS 411: Quantum Technology (mandatory)
    - Physics II, School of Mineral Resources Engineering (FYS 102)

- Graduate courses taught
    - FYS 602: Quantum Technology (FYS 602) (crosslisted)

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed
    - Slides for the theory part Physics-Electromagnetism (FYS 102)

    - Authored textbooks

## B – Publications

- Publications in refereed journals
    - Submitted: those published/appeared (see below)

    - Accepted:
        - Sebastian Restrepo, Javier Cerrillo,, V. M. Bastidas, D. G. Angelakis, T. Brandes, "Driven open quantum systems and Floquet stroboscopic dynamics". Phys Rev. Let

- C. Koke, C. Noh, D. G. Angelakis*, "Dirac equation in 2-dimensional curved spacetime, particle creation, and coupled waveguide arrays", Annals of Physics

  o Published:
    - C. Koke, C. Noh, D. G. Angelakis*, "Dirac equation in 2-dimensional curved spacetime, particle creation, and coupled waveguide arrays", Annals of Physics 374, 162 (2016).
    - J. J. Mendoza-Arenas, S. R. Clark, S. Felicetti, G. Romero, E. Solano, D. G. Angelakis, and D. Jaksch, "Beyond mean-field bistability in driven-dissipative lattices: Bunching-antibunching transition and quantum simulation", Phys. Rev. A 93, 023821 (2016).
    - A. V. Sorokin, M. Aparicio Alcalde, V. M. Bastidas, G. Engelhardt, D. G. Angelakis, T. Brandes, "Semiclassical bifurcations and topological phase transitions in a one-dimensional lattice of coupled Lipkin-Meshkov-Glick models", arXiv: 1604.08023, Phys Rev. E. 94, 0321123 (2016)
    - D.G. Angelakis* and C. Noh "Many-body physics and quantum simulations with light" Report of Progress in Physics, 80 016401 (2016)

- Patents
  o *GRANTED*

# C – Awards & Distinctions

➢ Invited professor, Kavli Institute of Theoretical Physics, University of California in Santa Barbara USA
➢ "Invited key participant" in "Many-body physics with light" KITP program (2 months).

# D – Funded Projects

- Current projects:
  o **EU COST Action "Nanoscale Quantum Optics**". National representative, member of the core and management committee for Greece and deputy WG4 leader for 2015-2018. Receiving travel support and conference organizing support. Total budget allocated ~150K Euros per year, ~30K for a conference to be organized by in Crete, June 4-11, 2016. Website: http://www.cost-nqo.eu/

- Project proposals submitted:
  o the FET open Proactive Call on Quantum Simulations

# E – Professional service

- Associate Editor duties

- o   Editorial board member of European Physical Journal: Quantum Technology

- Conference Technical Program Committee service
  - o   Chairman of the program committee of International School and Workshop on "Many-body physics and quantum simulations with light", Chania, Crete June 4-11, 2016 http://qlightcrete2016.org

- Conference Organization (specify role)
  - o   Program committee member, "International Conference on Quantum Computation, Communication and Measurement (QCMC2016), to be held in CQT/NUS, Singapore, 4-8 July 2016 https://qcmc.quantumlah.org/
  - o   Main organizer of International School and Workshop on "Many-body physics and quantum simulations with light", Chania, Crete June 4-11, 2016 http://qlightcrete2016.org

- Reviewing activities
  - o   Reviewer for research proposals submitted to: the EU ERC Starting Grant scheme, the EU ERC Consolidator Grant scheme, the European Young Investigators Award Scheme, the Netherlands Organization for Scientific Research, Swiss Research Council, Polish Research Council, Austrian Research Council
  - o   Reviewer for scientific papers at: Science, Nature, Nature Physics, Nature Communications, Phys. Rev Let., Phys. Rev. A., New Jour. of Phys., Jour. of Opt. Soc. Amer. B, Journ. of Opt. Phys. A, Phys. Let. A, Opt. Comm., J. Mod. Opt., Eur. Phys. Let and Eur. Phys. Journ. D.

- Invited talks in international meetings
  - o   "Quantum simulations with strongly interacting photons", International workshop on quantum technologies and metamaterials, Spetses, Greece June 2016.
  - o   "Many-body physics with light",  Workshop SU(N), gauge fields and cold atoms, 18-20 January 2016, MajuLab, CNRS-UMJ collaboration,  NUS, January 2016, Singapore

- Invited talks in institutions abroad
  - o   Many-body physics with light: From Mott transition to topological pumping with photons", Physics Department, University College London, August 2016
  - o   "From Mott transition to topological pumping with photons", Physics Department, University of Oxford, August 2016
  - o   *"Probing the topological properties of the Jackiw-Rebbi model with light"*, Physics Department and CN Yang Institute for Theoretical Physics, State University of New York, NY USA January 2016
  - o   "Engineering and probing many-body states of light in driven-dissipative arrays", Kavli Insitute of Theoretical Physics, California, USA, November 2015

## F – Service to the University and the School

- School responsibilities
    - Member of the departmental staff committee

- University responsibilities
    - Member of the school of ECE staff committee

## G – Advising

- Active graduate students supervised

    - Ph.D. and M.Sc. students supervised (advisor, in progress)
        - Shetakis Nikolaos (Ph.D.)
        - Kalogerakis Michalis (Ph.D.)

    - Ph.D. and M.Sc. degrees awarded (committee member)

    - Ph.D. and M.Sc. Degrees (committee member)
        - Bassford Michalis – Dimitris (Ph.D.)
        - Konstantakis Christos (Ph.D.)
        - Moutzianou Georgios (Ph.D.)
        - External examiner of Jian Bu You PhD thesis entitled, " Title: Majorana fermion in topological superconductor and Mott-superfluid transition in circuit-QED system", National University of Singapore August 2015

- Undergraduate students supervised

    - Diploma theses in progress (committee member)
        - Vardakis Konstantinos

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# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Demosthenes Ellinas

**Rank:** Professor

**Years in rank:** 7

**Full-time or part-time:** Full-time

**Division:**

**Lab affiliation: QLab**

# A – Teaching

- Undergraduate courses taught
    - MATH 201: Linear Algebra
    - MATH 208: Discrete Mathematics
    - MATH 302: Applied Mathematics
    - MATH 412: Introduction to Quantum Information Science

- Graduate courses taught
    - MATH 601: Introduction to Quantum Information Science

- Curriculum & course development
    - Lecture notes / slides developed
    - MATH 201: Linear Algebra: Collection of solved exercises p. 54
    - MATH 208: Discrete Mathematics : Collection of solved exercises p. 33
    - MATH 302: Applied Mathematics: Collection of solved exercises p. 39
    - MATH 412, MATH 601: Introduction to Quantum Information Science : Lecture notes

    - Authored textbooks

# B – Publications

- Publications in refereed journals

  - Submitted: those published/appeared (see below)
    - PD Jarvis, D Ellinas, Reports on Mathematical Physics, "Algebraic random walks in the setting of symmetric functions" p. 18 event processing: Status and prospects in the Big Data era.

  - Accepted:

  - Published:
    - D Ellinas, G Kaniadakis, JK Pachos, AM Scarfone, Entropy 18 (9), 339 (2016), "Quantum Computation and Information: Multi-Particle Aspects"
    - D Ellinas, C Konstandakis, Reports on Mathematical Physics 77 (1), 105-128, "Parametric quantum search algorithm as quantum walk: a quantum simulation"

  - Publications in refereed conferences
    - Published: VE Lembessis, M Babiker, D Ellinas, AIP Conference Proceedings 1742 (1), 030009, "The role of Gouy phase on the mechanical effects of Laguerre-Gaussian light interacting with atoms"

# C – Awards & Distinctions

# D – Funded Projects

- Current projects:
  - Invitation to join  COST Action Proposal OC-2016-1-20969 " Applied Logical Structures " as Secondary Proposer

- Project proposals submitted:

# E – Professional service

- Associate Editor duties
  - Journal of King Saud University - Science

- Society Technical Committee duties
  - C. Carathéodory Research Funding Program, University of Patras: member of the screening committee
  - Greek Initiative in Quantum Technology : member of the group

- Conference Technical Program Committee service

- Conference Organization (specify role)
  - SigmaPhi Internatioal Conferences on Statistical Physics, Organizing Committee 2011 - present.

- Reviewing activities
  - Journal Physics A: Mathematical and Theoretical
  - EPJC : European Physics Journal C
  - Entropy
  - Physics Letters B

# F – Service to the School and the University

- School responsibilities

- University  responsibilities
  - Committee of graduate studies program: member
  - Committee of postgraduate studies program: member

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Bassford Michalis Dimitris (Ph.D.)
    - Konstantakis Christos (Ph.D.)

  - Ph.D. and M.Sc. degrees awarded (committee member)

  - Ph.D. and M.Sc. Degrees (committee member)
    - Shetakis Nikolaos (Ph.D.)
    - Kastrinakis Marios (M.Sc.)

- Undergraduate students supervised

  - Diploma theses in progress
    - Vardakis Konstantinos

  - Diploma theses completed (supervisor)
    - Ntevetzakis Giorgos, "Ebits at a Distance: Quantum Algorithms and Circuits for Teleportation of Quantum Resources", p. 74

  - Diploma theses in progress (committee member)
    - Diamantis Christos
    - Drakos Vissarios

  - Diploma theses completed (committee member)
    - Kastrinakis Marios (M.Sc.)

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Daphne Manoussaki
**Rank:** Assistant Professor
**Years in rank:** 10
**Full-time or part-time:** Full
**Division:**
**Lab affiliation:**

# A – Teaching

- Undergraduate courses taught
    - MATH 101: Mathematics I (mandatory)
    - MATH 203:  Differential Equations

- Graduate courses taught
    - MATH 603: Mathematical Biology

# B – Publications

- Publications in refereed journals
    - Submitted:

# C – Awards & Distinctions

# D – Funded Projects

# E – Professional service

- Society Technical Committee duties

- Conference Organization (specify role)

# F – Service to the School and the University

- School responsibilities
  - Committee for the revision of the Undergraduate Curriculum
- University responsibilities

# G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, completed)

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - C. Kokkinaki (M. Sc. student, advisor: D. Manoussaki)
    - N. Papadakis (Ph.D. student, advisor: G. Stavroulakis)

- Undergraduate students supervised

  - Diploma theses in progress (committee member)

  - Diploma theses completed (committee member)
    - C. Constantinides (advisor: G. Karystinos)
    - N. Kontos (advisor: Y. Papaefstathiou)

# Technical University of Crete

## School of Electronic & Computer Engineering

## Annual Activity Report

*For the period: Sep. 1, 2015 to Aug. 31, 2016*

**Name:** Minos Petrakis
**Rank:** Associate Professor
**Years in rank:** 2,5
**Full-time or part-time:** Full-time
**Division:**
**Lab affiliation:**

## A – Teaching

- Undergraduate courses taught
    - MATH 102 : Mathematics II (mandatory)
    - MATH 107 : Probability Theory – Statistics (mandatory)

- Graduate courses taught
    - Fourier Series and Complex Analysis
    - Applied Functional Analysis

- Curriculum & course development
    - New courses / labs developed

    - Lecture notes / slides developed

    - Authored textbooks

## B – Publications

- Publications in refereed journals
    - Submitted: those published/appeared (see below)

    - Accepted:

    - Published:

- Publications in refereed conferences
    - Published:

- Patents

## C – Awards & Distinctions

## D – Funded Projects

- Current projects:

- Project proposals submitted:

## E – Professional service

- Associate Editor duties

- Society Technical Committee duties

- Conference Technical Program Committee service

- Conference Organization (specify role)

- Reviewing activities
  - Reviews zentralblatt-math

## F – Service to the School and the University

- School responsibilities

- University responsibilities

## G – Advising

- Active graduate students supervised

  - Ph.D. and M.Sc. students supervised (advisor, in progress)
    - Konstantakis Christos (Ph.D.)