

PERSONAL STATEMENT

I am passionate about **network analysis and multi-disciplinary research**.

I have been analyzing complex real-world networks, spanning from the Internet to the brain. My Ph.D. Thesis at Columbia University introduced the mobile peer-to-peer computing, a highly innovative paradigm in wireless networks. As a tenure-track assistant Professor at the University of North Carolina at Chapel Hill, I obtained significant expertise in network analysis. Since then I have been applying machine-learning, statistical analysis, and game-theory algorithms in analyzing large-scale complex networks. Recently, I have been making a bold career transition in computational neuroscience, where I apply techniques that span from the recurrent quantification analysis to advanced graph-theory, machine-learning, and information theory in a creative manner.

With the fascinating advances of deep-learning, AI, and high-performance scalable computing and storage technologies, the field of neuroscience embarks in a new era. My current research focuses on the identification of the fundamental modules of computation in visual cortex and neural-circuit functions during learning. I am particularly interested in understanding how information about the visual stimulus is represented, and how these circuits malfunction in normal aging and in several disease states. Our on-going joint research with Professor Smirnakis on the identification of functional intra-layer and inter-area network patterns in V1 under spontaneous conditions and their relation to the stimulus processing properties of the cortex has yielded promising results. In another ongoing project on epilepsy, we aim to identify what abnormal interactions between pyramidal neurons allow hyper-synchrony (seizure) to emerge, thereby building a cell-type specific seizure propagation model in the cortex. Powerful recurrent quantification analysis and graph-theoretical techniques have been applied for the identification of abnormal interictal activity patterns predictive of impending seizures. The collected biological data exhibit noise, biases, complex dynamic behavior at multiple spatio-temporal scales, stochasticity, and non-linearity, and their analysis requires advanced tools (combining signal processing, time-series analysis, learning, deep-learning, graph-theory, and dynamic complex systems). I aim to bring my multidisciplinary research expertise from telecommunication and networks, sensors, AI, and systems, in network systems neuroscience and development of bio-inspired technologies.

I am committed in the creation of a stimulating multidisciplinary research environment on network neuroscience with "bridges" of collaboration with top research labs world-wide, including *Smirnakis Lab (Harvard Medical School)*, as well as, *Indiveri Lab (UZH)* and *IBM-Zurich*, which are doing pioneering work in neuromorphic computing. With them, in the context of an EU Marie Curie RISE project (neuronsXnet) that I coordinate, we strive for research excellence and to develop innovative systems, leading to a new era of collaborative research in network systems neuroscience and bio-inspired technologies. I am also committed to educate and mentor young researchers and raise the public knowledge about the fascinating field of neuroscience. Given that the machine-learning and analysis of neuroscience data is becoming increasingly important, this training can have a significant impact on the new generation of highly-skilled network systems neuroscientists.

POSITIONS

Professor Department of Computer Science, **University of Crete** (since September 2017)
Research Associate Institute of Computer Science, **FORTH**, Greece (since September 2004)
Marie Curie RISE Fellow Harvard University (June-July 2019)
Fulbright Scholar CSAIL MIT (Spring 2017, during sabbatical from University of Crete)

PAST EMPLOYMENT

Associate Professor Department of Computer Science, **University of Crete** (February 2012-August 2017)
Assistant Professor (tenured) Department of Computer Science, University of Crete (Sept. 2004–Feb. 2012)
Visiting Full Professor KTH Royal Institute of Technology, School of Electrical Engineering, Stockholm, Sweden (May 2011 – September 2013)
Adjunct Professor Department of Computer Science, **University of North Carolina, Chapel Hill** (July 2006-2009)
Assistant Professor (tenure-track), Department of Computer Science, **University of North Carolina at Chapel Hill** (July 2002 – July 2004, on leave from August 2004 – June 2006)
Visiting Professor Department of Computer Science, **University of Crete** (September 2004 - August 2005)

EDUCATION

Ph.D. Computer Science, **Columbia University**, New York, NY, October 2002
Ph.D. Dissertation “Resource sharing in mobile wireless networks” Advisor: Henning Schulzrinne
M.Phil. Computer Science, **Columbia University**, New York, NY, May 2002
M.Sc. Computer Science, **New York University**, New York, NY, May 1994
B.S. Computer Science, **University of Crete**, Greece, June 1992

AWARDS & DISTINCTIONS

1. **Comcast Innovation Fund**, August 2016
2. **Fulbright Award 2016** for her visiting professorship at CSAIL MIT in the Spring 2017
3. **Google Faculty Award** for Research Excellence in Academia 2013; the first recipient from a University/Research Center in Greece; Acceptance rate < 15% (as of 2013)
4. **Research Excellence**, Investigator-driven Grant (similar to NSF Career Award) 2012–2015
5. **Best Paper Award** 8th Int. Conf. Quality of Multimedia Experience (QoMEX), 2016
6. **Honorable mention for papers** in IEEE LANMAN 2010, IEEE LANMAN 2005, ACM Int. Conf. on Modeling, Analysis & Simulations of Wireless & Mobile Systems 2010
7. **Google and Microsoft grants** for academic course development
8. **UNC Junior Faculty Development Award** 2006
9. **IBM Faculty Award 2004 & IBM Faculty Award 2003**
10. **Best student paper/poster**, Advances in Wired & Wireless Comm., IEEE Sarnoff Symposium 2001
11. **Rank 1st**, graduation Department of Computer Science, University of Crete 1992
12. Scholarships based on academic achievement, National Scholarship Foundation, Greece (1988–1991)
13. **Rank 2nd nationwide**, National Entrance Exams, Department of Computer Science, University of Crete 1988
14. **Prizes** in Examinations in Mathematics, Greek Mathematical Society 1985 –1987
15. **Rank 1st nationwide**, Examination in Mathematics, Greek Mathematical Society 1985

PUBLICATIONS

BOOK

1. **Maria Papadopouli and Henning Schulzrinne. Peer-to-peer Computing for Mobile Networks: Information Discovery and Dissemination.** Springer Eds., ISBN: 978-0-387-24427-3, 2009

ARTICLES IN PEER REVIEW JOURNALS

1. Ioannis Smyrnakis, Maria Papadopouli, Ganna Palagina, Stelios Manolis Smirnakis. **Information Capacity of a Stochastically Responding Neuron Assembly**. Elsevier Neurocomputing, 2020
2. M.Plakia, E.Tzamosis, T.Asvestopoulou, G. Pantermakis, N. Filippakis, H. Schulzrinne, Y. Kane-Esrig, **M. Papadopouli. Should I stay or should I go: Analysis of the impact of application QoS on user engagement in YouTube**. ACM Transactions TOMPEC 2020
3. Eirini Troullinou, Grigorios Tsagkatakis, Ganna Palagina, Maria Papadopouli, Stelios Manolis Smirnakis, Panagiotis Tsakalides. Adversarial dictionary learning for a robust analysis and modelling of spontaneous neuronal activity. Elsevier Neurocomputing, 2020
4. Georgios Fortetsanakis, Ioannis Dimitriou, Maria Papadopouli. **A Game-Theoretical Analysis of Wireless Markets using Network Aggregation**. IEEE Transactions on Mobile Computing, May 2016 (**A* rank**).
5. P. Charonyktakis, M. Plakia, I. Tsamardinos, M. Papadopouli. **On user-centric modular QoE prediction for VoIP based on machine-learning algorithms**. IEEE Transactions on Mobile Computing, July 2015 (**A* rank**).
6. G. Fortetsanakis, M. Papadopouli. **On Multi-layer Modeling and Analysis of Wireless Access Markets**. *IEEE Transactions on Mobile Computing* (**A* rank**), January 2015.
7. M. Katsarakis, P. Charonyktakis, G. Fortetsanakis, A. Kostopoulos, **M. Papadopouli**. “**On user-centric tools for QoE-based recommendation & real-time analysis of large-scale markets**”. *IEEE Communications Magazine*, September, 2014.
8. I. Glaropoulos, A. Vizcaino Luna, V. Fodor, **M. Papadopouli**. **Closing the gap between traffic workload and channel occupancy models for 802.11 networks**. *Elsevier Ad Hoc Networks* 2014.
9. D. Milioris, G.Tzagkarakis, A. Papakonstantinou, **M. Papadopouli**, P. Tsakalides. **Low-dimensional Signal-Strength Fingerprint-based Positioning in Wireless LANs**. Elsevier Ad Hoc Networks 2011.
10. T. Patkos, A. Bikakis, G. Antoniou, **M. Papadopouli**. **Design & challenges of a semantics-based framework for context-aware services**. *International Journal of Reasoning-based Intelligent Systems* 2009.
11. G. Tzagkarakis, **M. Papadopouli**, P. Tsakalides. **Trend Forecasting based on Singular Spectrum Analysis of Traffic Workload in a Large-Scale Wireless LAN**. *Elsevier Performance Evaluation*, February 2008.
12. N. Kotilainen, L. Kriara, K. Vandikas, K. Mastorakis, **Maria Papadopouli**. **Location-Based Media Sharing in a MP2P Network**. *MC²R Mobile Computing & Communications Review*, January 2008.
13. L. Golubchik, J.C.S. Lui, M. Papadopouli. **A Survey of Approaches to Fault Tolerant Design of VOD Servers: Techniques, Analysis & Comparison**, Special issue of *Parallel Computing on Parallel Data Servers & Applications*, Vol. 24, Num. 1, Jan 1998.
14. M. Papadopouli, L. Golubchik. **Support of VBR Video Streams Under Disk Bandwidth Limitations**. Special issue of *ACM SIGMETRICS'Performance Evaluation Review (PER)*, December 1997.

ARTICLES IN PEER REVIEW CONFERENCE PROCEEDINGS

1. V. Sideridis, M. Papadopouli. **Gesturekeeper: Gesture identification for controlling devices in IoT environments**. 27th European Signal Processing Conference, EUSIPCO 2019.
2. A. Zacharakis, M. Kampourakis, O.Mousouros, G. Palagina, J. Meyer, S. Smirnakis, I. Smyrnakis, M. Papadopouli. Functional Network Connectivity Analysis in Absence Epilepsy Using Stargazer Mice. 19th International Conference on BioInformatics and BioEngineering, BIBE, 2019.
3. T. Asvestopoulou, V. Manousaki, A. Psistakis, E. Nikolli, V. Andreadakis, I. Aslanides, Y/. Pantazis, I. Smyrnakis, M. Papadopouli. **Towards a robust and accurate screening tool for dyslexia with data augmentation using GANs**. 19th International Conference on BioInformatics and BioEngineering, BIBE 2019.
4. G.Tzagkarakis, G. Palagina, I. Smyrnakis, S. Smirnakis, M.Papadopouli. **Detection of stimuli changes in neural eventograms using the line of synchronization of global recurrence plots**. *Proc. of International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2019.

5. E. Tzamouisis, M. Papadopouli. **On hybrid modular recommendation systems for video streaming.** <https://arxiv.org/abs/1901.01418>
6. E. Troullinou, G. Tsagkatakis, A. Palagina, M. Papadopouli, S. Smirnakis, P. Tsakalides, Dictionary Learning for Spontaneous Neural Activity Modeling *25th European Signal Processing Conf. (EUSIPCO)*, 2017.
7. M. Katsarakis, R. Teixeira, M. Papadopouli, V. Christophides. **Towards a Causal Analysis of Video QoE from Network and Application QoS.** ACM SIGCOMM Workshop on QoE-based Analysis & Management of Data Communication Networks; Co-located with ACM SIGCOMM'16.
8. M. Plakia, M. Katsarakis, P. Charonyktakis, I. Markopoulos, M. Papadopouli. **On user-centric analysis & prediction of QoE for video streaming using empirical measurements.** 8th Int.' Conference on Quality of Multimedia Experience (QoMEX), 2016 *Best Paper Award*.
9. Georgios Fortetsanakis, Maria Papadopouli. **How Beneficial is the WiFi Offloading? A Detailed Game-Theoretical Analysis in Wireless Oligopolies.** IEEE WoWMoM, 2016.
10. Nikolaos Rapousis, Maria Papadopouli. **Performance analysis of a user-centric crowd-sensing water quality assessment system.** CySWater workshop, part of the CPSWeek, 2016.
11. A. Kostopoulos, M. Papadopouli. **Looking for New Allies in Mobile Internet Market.** IEEE INFOCOM SDP, 5th Workshop on Smart Data Pricing, 2016.
12. Kostopoulos, I. Papafili, G. Fortetsanakis M. Papadopouli. **Pricing Wireless Access Services: The Effect of Offloading & Users' Bounded Rationality.** Wireless On-demand Network systems & Services Conf, 2016.
13. P. Charonyktakis, M. Plakia, M. Katsarakis, M. Papadopouli. **On user-centric QoE prediction for VoIP & video based on machine-learning.** NSF/FCC Workshop Tracking QoE, Princeton University, 2015.
14. M. Katsarakis, V. Theodosiadis, M. Papadopouli. **Evaluation of a User-centric QoE based Recommendation Tool for Wireless Access.** ACM SIGCOMM Works. Crowdsourcing & crowd-sharing of Big Internet Data, 2015.
15. N. Rapousis, M. Katsarakis, M. Papadopouli. **"QoWater-A crowd-sourcing approach for assessing the water quality."** 1st CySWater Workshop, CPS Week, 2015.
16. K. Karagiannaki, S. Chonianakis, E. Patelarou, N. Panosopoulou, M. Papadopouli. **mMamee: A mHealth Platform for Monitoring & Assessing Maternal Environmental Exposure.** 28th IEEE Int' Symposium on Computer-Based Medical Systems, 2015.
17. Meidanis, I. Stiakogiannakis, M. Papadopouli. Pricing for Mobile Virtual Network Operators: the contribution of u-map", IEEE DySPAN, 2014 (poster).
18. M. Katsarakis, V. Theodosiadis, M. Dramitinos, M. Papadopouli. **u-map: a User-centric QoE-based Recommendation Tool for Wireless Access Markets, ACM S3 2013.**
19. G. Fortetsanakis, M. Papadopouli, G. Karlsson, M. Dramitinos, E. A. Yavuz. **To subscribe, or not to subscribe: Modeling and analysis of service paradigms in cellular markets.** IEEE DySPAN 2012
20. G. Fortetsanakis, M. Katsarakis, M. Plakia, N. Syntychakis, M. Papadopouli. **Supporting Wireless Access Markets with a User-centric QoE-based Geo-database, ACM MobiArch 2012.**
21. G. Fortetsanakis, M. Katsoulakis, M. Papadopouli. **A novel multi-layer framework for modeling the evolution of spectrum markets and cognitive-radio devices,** IEEE DySPAN, 2011.
22. T. Alexandridis, P. Charonyktakis, A. Makrogiannakis, A. Papakonstantinou, Maria Papadopouli. **Forthroid on Android: A QR-code based Information Access System for Smart Phones,** IEEE LANMAN 2011.
23. D. Milioris, L. Kriara, A. Papakonstantinou, G. Tzagkarakis, P. Tsakalides, M. Papadopouli. **Empirical evaluation of signal-strength fingerprint positioning in wireless LANs,** 13th ACM International Conference on Modeling, Analysis and Simulation of Wireless & Mobile Systems. 2010. **Honourable mention.**
24. Tsompanidis, G. Fortetsanakis, T. Hirvonen, M. Papadopouli. **A comparative analysis of the perceived quality of VoIP under various wireless network conditions.** International Conference on Wired/Wireless Internet Communications (WWIC), 2010.
25. Tsompanidis, G. Fortetsanakis, T. Hirvonen, M. Papadopouli. **Analyzing the impact of various wireless network conditions on the perceived quality of VoIP.** IEEE LANMAN 2010. *Honourable mention.*

26. N. Kotilainen, M. Papadopouli. **You've Got Photos! The design and evaluation of a location-based media-sharing application.** *4th Int. ' Mobile Multimedia Communications Conference*, 2008.
27. T. Patkos, A. Bikakis, M. Papadopouli, G. Antoniou, D. Plexousakis. **Distributed AI for Ambient Intelligence: Issues and Approaches.** *European Conference on Ambient Intelligence 2007*.
28. K. Vandikas, L. Kriara, T. Papakonstantinou, A. Katranidou, H. Baltzakis, M. Papadopouli. **Empirical-based analysis of a cooperative location-sensing system.** *ACM Int. 'Conf. Autonomic Computing & Comm. Syst.* 2007.
29. G. Tzagkarakis, M. Papadopouli, P. Tsakalides. **Singular Spectrum Analysis of Traffic Workload in a Large-Scale Wireless LAN.** *ACM/IEEE International Symposium on Modeling, Analysis & Simulation of Wireless & Mobile Systems*, 2007.
30. T. Patkos, A. Bikakis, G. Antoniou, M. Papadopouli, D. Plexousakis. **A Semantics-based Framework for Context-Aware Services: Lessons Learned and Challenges,** *4th International Conference on Ubiquitous Intelligence and Computing*, Hong Kong, July 2007. **Acceptance percentage 29%.**
31. M. Ploumidis, M. Papadopouli, T. Karagiannis. **Multi-level application-based traffic characterization in a large-scale wireless network.** *IEEE Int. ' Symposium WoWMoM 2007*.
32. M. Karaliopoulos, M. Papadopouli, E. Raftopoulos, H. Shen. **On scalable measurement-driven modeling of traffic demand in large WLANs.** *IEEE Workshop on Local & Metropolitan Area Networks*, 2007.
33. T. Patkos, A. Mpikakis, G. Antoniou, M. Papadopouli, D. Plexousakis. **A Semantic-based Framework for Context-Aware Pedestrian Guiding Services.** *Int. ' Works. Semantic Web Technology for Ubiquitous & Mobile Applications*. 2006.
34. F. Hernandez-Campos, M. Karaliopoulos, M. Papadopouli, H. Shen. **Spatio-Temporal Modeling of Traffic Workload in a Campus WLAN.** *2nd Annual Int. ' Wireless Internet Conf.* 2006. **Acceptance percentage 27%.**
35. M. Papadopouli, M. Moudatsos, M. Karaliopoulos. **Modeling the Roaming in Large-scale Wireless Networks using Real Measurements.** *Workshop on advanced experimental activities on wireless networks & systems*, 2006.
36. M. Papadopouli, E. Raftopoulos, H. Shen. **Evaluation of short-term traffic forecasting algorithms in wireless networks.** *Conf. on Next Generation Internet Design and Engineering*, 2006.
37. P. Porwal, M. Papadopouli. **On-demand channel switching for multi-channel wireless MAC protocols.** *12th European Wireless Conference*, 2006.
38. F. Hernandez-Campos, M. Papadopouli. **Assessing the Real Impact of 802.11 WLANs: A Large-Scale Comparison of Wired and Wireless Traffic.** *14th IEEE Workshop on Local & Metropolitan Area Networks*, 2005. **(Ranked 1st best paper)**
39. M. Papadopouli, H. Shen, M. Spanakis. **Modeling client arrivals at Aps in wireless campus-wide networks.** *14th IEEE Workshop on Local and Metropolitan Area Networks*, 2005. **(Ranked fourth best paper)**
40. F. Hernandez-Campos, M. Papadopouli. **A comparative measurement study of the workload of wireless access points in campus networks.** *16th Annual IEEE International Symposium on Personal Indoor and Mobile Radio Communications*, 2005.
41. M. Papadopouli, H. Shen, E. Raftopoulos, M. Ploumidis, F. Hernandez-Campos. **Short-term traffic forecasting in a campus-wide wireless network.** *IEEE Int. ' Symposium on Personal Indoor & Mobile Radio Communications*, 2005.
42. M. Papadopouli, H. Shen, M. Spanakis. **Characterizing the mobility and association patterns of wireless users in a campus.** *11th European Wireless Conf.* Nicosia, 2005.
43. F. Chinchilla, M. Lindsey, M. Papadopouli. **Analysis of wireless information locality & association patterns in a campus.** *IEEE INFOCOM 2004*
44. H. Fretzagias, M. Papadopouli. **Cooperative location-sensing for wireless networks.** *IEEE Pervasive Computing & Communications*, 2004. **Acceptance percentage 15%.**
45. M. Papadopouli, H. Schulzrinne. **Effects of power conservation, wireless coverage & cooperation on data dissemination among mobile devices.** *ACM SIGMOBILE Symp. MOBIHOC 2001*. **Acceptance perc. 16%.**
46. P. Castro, B. Greenstein, R. Muntz, P. Kermani, C. Bisdikian, M. Papadopouli. **Locating application data across service discovery domain.** *ACM MOBICOM 2001* **Acceptance percentage 10%.**

47. **M. Papadopouli, H. Schulzrinne. A Performance analysis of 7DS: a peer-to-peer data dissemination & prefetching tool for mobile users.** *Advances in Wired and Wireless Communications, IEEE Sarnoff Symposium Digest* 2001. **Best student paper/poster award.**
48. **M. Papadopouli, H. Schulzrinne. Design & implementation of a P2P data dissemination & prefetching tool for mobile users.** *NY Metro Area Networking Work.* 2001.
49. **M. Papadopouli, H. Schulzrinne. Seven Degrees of Separation in Mobile Ad Hoc Networks.** *IEEE GLOBECOM*, 2000, San Francisco.
50. **M. Papadopouli, H. Schulzrinne. Network Connection Sharing in an Ad Hoc Wireless Network among Collaborative Hosts.** *NOSSDAV*, 1999
51. **M. Papadopouli, H. Schulzrinne.** "Resource Sharing in an Ad Hoc Wireless Network among Cooperative Hosts", *Dagstuhl Seminar on Mobile Multimedia Communication - Systems & Network*, 1999
52. **M. Papadopouli, L. Golubchik. A Scalable Video on Demand server for a Dynamic Heterogeneous Environment.** *Intl. Workshop on Multimedia Information Systems '98*. Also, Lecture Notes in Computer Science, Vol.1508, Springer, 1998.

Scholar Google with "Papadopouli Maria": H-index 24. Publications in IEEE Trans. on Mobile Computing, ACM MobiHoc, ACM MobiCom, IEEE Infocom, IEEE Percom, and IEEE Globecom. Several papers have received **honorable mention, best paper awards**, or had a high ranking in the reviewing process.

RESEARCH FUNDING – NATIONAL, EUROPEAN & INTERNATIONAL (COORDINATOR/PI)

1. **UNC Startup Research Funding**, 2002-2005 (\$ 250,000)
2. **UNC Junior Faculty Development Award Recipients**, 2006
3. **European Commission, Marie Curie International Reintegration Grant**, 2005-2007 (€ 80, 000)
4. **Hellenic Republic Ministry of Development**, General Secretariat for Research and Technology, Program "Cooperation with S & T Institutions in non-European Countries - 2005", FORTH - UNC (€60,000)
5. **Hellenic Republic Ministry of Development, General Secretariat for Research and Technology.** "Advanced services in wireless wide area networks for visitors and tourist-related companies and agencies of Crete-Wireless Information Service" (CRETE-WISE), *Co-PI* (€ 573,507)
6. **ENISA**, Position Paper on Mobile Identity Management (€ 4,999)
7. **Google, Google AndroidEDU programme, Equipment Award** (PI)
8. **ELKE**, University of Crete, Small-scale program. Travel grant (PI, €1,300)
9. **General Secretariat for Research and Technology, "ARISTEIA" Excellence, Investigator-driven.** Developing the foundations for modelling and Analysis of Spectrum Markets (€386.000, PI, equivalent with NSF Faculty Career Award)
10. **Google Faculty Award** for Research Excellence in Academia 2013 (PI)
11. **Forthnet, S.A.**, February 2015-September 2015 (€30.000, PI)
12. **Neurocom S.A.**, May 2015-July 2015 (€14.000,PI)
13. **Fulbright Faculty Award, 2016** for supporting the visiting professorship at CSAIL, MIT during January 2017 until May 2017, sabbatical from University of Crete (PI)
14. **Forthnet S.A.**, July 2016-May 2017 (€40.000, PI)
15. **Comcast**, Comcast Innovation Fund, 2017- 2018 (\$50,000, PI).
16. **Greek Diaspora Fellowship Program** 2016-2017 & 2019-2020 for hosting Professor S. Smirnakis (Harvard Medical School) for joint teaching & research activities on neuroscience-driven analysis.
17. **Hellenic Foundation for Research & Innovation** for the support of postdoctoral researchers 2018-2021, on Dissecting Multi-Neuronal Modules of Computation in the Neocortex. *Ranked among the top 5 in the areas of Mathematics and Communication Sciences* (€ 237,000, Coordinator).
18. **Niarchos-FORTH Postdoctoral Fellowship** 2019-2020 on Network Analysis of Visual Cortex during Learning (PI/Supervisor, Fellow: Dr. Kehayas)
19. **Fondation Santé**, January 2019-2020 & 2020-2021 on Neuronal networks in epilepsy – Deciphering the role of activity patterns in focal cortical seizures (€55,000, PI)
20. **Forth Synergy**, November 2019-2021 on Neural Networks in Alzheimer's disease. (€80,000, PI).

21. **Marie Curie, Individual Fellowships 2021-2023** on Brain Networks in Learning. (€165,085, PI & MC Supervisor, MC Fellow Dr. Kehayas)
22. **Marie Curie, RISE, 2021-2025** Network Analysis in Neocortex during Passive and Active Learning. (€901.600, PI, Coordinator)
23. **Hellenic Foundation for Research & Innovation** for the support of faculty members on Changes of Brain Networks under Learning in Normal Aging and Alzheimer's Disease. **Ranked within top 5%** in the Evaluation Process; (€200,000, PI, equivalent with NSF Faculty Career Award)

ACADEMIC FUNDING - MOBILITY PROGRAMS (ROLE: CO-PI/COORDINATOR)

Erasmus+ with the Department of Neurology, Harvard Medical School, 2016-2017 (PI); Erasmus+ with the Department of Neurology, Harvard Medical School, 2017-2018 (submitted proposal, PI); Erasmus+ Leader (Departmental Coordinator) ; Greek Diaspora Program (Host), 2016 & 2019 (PI)

GRADUATE STUDENT & POSTDOCTORAL RESEARCHER SUPERVISION

26 M.Sc. students at the Department of Computer Science, University of Crete and University of North Carolina at Chapel Hill; **5 Ph.D. students** at the Department of Computer Science, University of Crete; **21 postdoctoral researchers** at the Department of Computer Science, University of Crete, Department of Computer Science, UNC, Institute of Computer Science, FORTH, and KTH School of Electrical Engineering (6 of them co-advised).

SUPERVISION OF PH.D. THESIS

George Fortetsanakis, “A multi-layer game-theoretical framework for modeling wireless access markets”, Ph.D. in Computer Science, University of Crete, June 1st, 2016. Now in EY Greece; Michalis Katsarakis, 2015 – (during December 2015-May 2016 intern at INRIA); Mohamed Mashatshat, 2016 – (co-advised with Prof. Traganitis and Dr. Tragos); Elias Raftopoulos (Ph.D. October 2007-May 2009) Completed his Ph.D. at ETH-Zurich; Despoina Triantafyllidou, “Exploit link-state routing to improve TCP in mobile ad hoc networks”, Ph.D. in Computer Science between LRI, University of Paris-Sud XI, Orsay and University of Crete (co-advising by K. Al Agha & V. Siri), 2009. Now Product Manager in Dimetis GmbH.

CURRICULUM DEVELOPMENT IN COMPUTATIONAL NEUROSCIENCE

Established and jointly with Professor Smirnakis teach a 12-week graduate course on neuroscience-driven network analysis methods, offered in the Department of Computer Science, cross-listed in four graduate programs of the University of Crete in the Fall 2017, 2019, and Spring 2021 semesters. The course introduces network analysis techniques (e.g., graph theory, neural networks, machine-learning, statistical analysis, and graph signal processing), built a basic knowledge in neurosciences and brain networks, and offered specific lectures tailored to provide the appropriate background for the projects of the course.

PROFESSIONAL ACTIVITIES COMMUNITY SERVICE (SELECTED)

EDITOR IEEE Transactions on Mobile Computing, Associate Editor (December 2016-December 2019); **Springer, Traffic Monitoring and Analysis, LNCS 5537**, 1st Cost Action Data Traffic and Analysis (TMA) workshop proceeding; *Special Issue of the International Journal of Network Management*, Wiley, Traffic Monitoring and Network Measurements: from Theory to Practice.

GENERAL CHAIR: 26th ACM MobiCom’20 (Vice General Chair) Flagship Annual Conference on Mobile Computing and Networking;

PROGRAM CO-CHAIR IN 11 CONFERENCES/WORKSHOPS: 20th IEEE Symposium WoWMoM’19; 5th *International N2Women* in conjunction with the ACM MobiCom’16; 17th *IEEE LANMAN’10 (general co-chair); Data Traffic and Analysis (TMA’09); 16th IEEE LANMAN; 1st, 2nd, 3rd International Workshops on Wireless Network Measurement* in conjunction with Mobisys’05, WiCON, and WiOPT, respectively; 1st, 2nd & 3rd

International Workshop on Mobile Peer-to-Peer Computing (MP2P). Selected Recent Program Committee: IEEE IMC2020, 2019, IEEE PAM 2018, IEEE PAM 2017, 2018, IEEE Infocom 2015

INDUSTRIAL CONSULTING

CapsicoHealth, Inc. a Silicon Valley-based company in healthcare management and data analytics.

EXPERT PANELS & COMMUNITY SERVICE (SELECTED)

Greek Diaspora Program 2020- NSF/FCC Workshop – Tracking Quality of Experience in the Internet, 2015 & 2017; EU FP7 Support Action EIFFEL Think Tank on the future of the Internet towards the development of the future networked society; **Cost Action, Data Traffic and Analysis (TMA)**, Management Committee Member, Greek representatives, Experts; **ENISA Mobile Identity Management Group, 2008; NSF Mobility models workshop 2007; Research Triangle Regional Partnership, North Carolina, Pervasive Computing, 2003;**

KNOWLEDGE TRANSFER (INDUSTRIAL INNOVATION, OUTREACH TO LAY PUBLIC)

Teach interdisciplinary graduate course on brain network analysis and modeling; Students from multiple graduate programs, such as the one at the Department of Computer Science, the Brain and Mind, and the Bioinformatics (recently established by the Medical School at the University of Crete and FORTH) can attend this course; **Erasmus+ bilateral agreement between the Department of Neurology, Harvard Medical School, and Department of Computer Science, University of Crete 2016-2017** that supported student & faculty exchange; **Erasmus+ Departmental Coordinator; Greek Diaspora Program (Host, 2016 & 2019); Greek Diaspora Strategic Planning; Organization committee of the Darwinian Mondays, a very popular public talk series,** with a large, diverse audience organized by the University of Crete, with strong interest in evolution, biology, neuroscience, and philosophy; **Strong commitment in outreach & mentoring activities to strengthen the women in Sciences and Technology** (e.g., participation in events organized by Google, Greek companies or forums) since 1997; **Strong commitment in public outreach activities** (e.g., giving talks and demos in Open House events at the University of Crete and FORTH; Day of Science at FORTH, outreach activities to students in high schools/lyceums) since 2005;