Emmanouil G. Spanakis

100 N. Plastira St., Vassilika Vouton, GR-70013 Heraklion, Crete, Greece (work) 34 Mistra St., GR-71305, Heraklion, Crete, Greece (permanent) +306972817661(M) +302810391446(W) +302810252715(H) spanakis@ics.forth.gr, www.spanakis.info

CURRICULUM VITAE

Current Appointment

Collaborating Researcher at the Computational BioMedicine Laboratory (CML) at the Institute of Computer Science of the Foundation for Research & Technology – Hellas (ICS-FORTH)

Visiting Lecturer at the Computer Science Department (CSD) of the University of Crete (UOC), Greece

Research Interests

Wireless communication networks and computational biomedicine. In particular, biomedical informatics and engineering, personal health systems and pervasive mobile monitoring, ubiquitous eHealth/mHealth related services in smart environment, wireless medical sensors and sensor networks for e-Health services, delay tolerant networking for e-health, security for eHealth services and network interoperability for e-health. Also, cross-layer design in wireless adhoc networks, wireless interference channel under SINR constrains, vehicular ad-hoc networks, performance and analysis of mobile ad-hoc routing protocols, and wireless network measurements analysis.

Education

Ph.D. in Computer Science

Computer Science Department, University of Crete, Greece Thesis: "Cross Layer Rate Adaptation in Wireless Ad-Hoc Networks"

November 2009

M.Sc. in Computer Science

Computer Science Department, University of Crete, Greece Thesis: "Routing Issues in Mobile Ad-Hoc Wireless Networks"

April 2004

B.Sc. in Computer Science

Computer Science Department, University of Crete, Greece

July 2001

Scholarships

Graduate scholar funded by the Greek Secretariat of Research and Technology (GSRT) under the "PENED 2003 Adhoc Networks" program. (2005 –2009)

Graduate scholar funded by the "Biomedical Informatics Laboratory", FORTH, Greece. (2004 –2005)

Graduate scholar funded by the "Telecommunications and Networks Laboratory", FORTH, Greece. (2003 –2004)

Graduate scholar funded by the "Centre for Medical Informatics and Health Telematics Applications", FORTH, Greece. (2001 –2003)

Undergraduate scholar funded by the "Centre for Medical Informatics and Health Telematics Applications", FORTH, Greece. (1998 –2001)

Conference/Session Organizer/Chair

International Workshop on "Advances in Personalized Healthcare Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies" (APHS 2016) in conjunction with the 6th EAI International Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2016, Transforming healthcare through innovations in mobile and wireless technologies, 14-16 November 2016, Milan, Italy.

International Conference on Personal, Pervasive and mobile Health (PPmH) in conjunction with the International 360° summit eHealth: Empowering Healthcare with Technology by EAI, 14-16 June 2016, Budapest Hungary.

International Workshop on "Advances in Personalized Healthcare Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies – The Digital Patient concept: Vision and Demonstrations" (APHS 2015) in conjunction with the 5th International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2015, Transforming healthcare through innovations in mobile and wireless technologies, 14-16 October 2015, London, UK.

International Workshop on "Advances in Personalized Healthcare Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies" (APHS 2014) at 4th International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2014, Athens, Greece, November 2014.

International Workshop on "Advances in Personalized Healthcare Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies" (APHS 2012) at 3rd International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2012, Paris, France, November 2012.

ICT Technologies and Tools for Chronic Disease Management, Special Session at 2nd International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2011, Kos, Greece, October 2011.

ICT Platforms and Technologies for the Daily Management of Chronic Diseases and the Support of the Ageing Population, Special Session at 2nd International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2011, Kos, Greece, October 2011.

Publications

- Spanakis EG, Santana S, Tsiknakis M, Marias K, Sakkalis V, Teixeira A, Janssen JH, de Jong H, Tziraki C Technology-Based Innovations to Foster Personalized Healthy Lifestyles and Well-Being: A Targeted Review, Journal of Medical Internet Research, JMIR 2016;18(6):e128, DOI: 10.2196/jmir.4863, PMID: 27342137 (Impact Factor: 4.532)
- Spanakis, M., Spanakis, E.G., Kondylakis, H., Sfakianakis, S.G., Genitsaridi, I., Sakkalis, V., Tsiknakis, M.N., & Marias, K. (2016). Addressing drug-drug and drug-food interactions through personalized empowerment services for healthcare. 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando FL, USA.
- 3. Spanakis, E.G., Spanakis, M., A. Karantanas & Marias, K. (2016). Secure Access to Patient's Health Records Using SpeechXRays a Mutli-Channel Biometrics Platform for User Authentication. 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando FL, USA.
- Spanakis, M., Spanakis, E.G., Kafetzopoulos, D., Sakkalis, V., Tsiknakis, M.N., Marias, K., & Dong, F. (2015).
 MyHealthAvatar platform: matching real life patients with the generated virtual profiles from in silico clinical trials. 24th Annual Meeting of the Population Approach Group in Europe (PAGE), At Hersonissos, Crete, Greece, Volume: ISSN 1871-6032.
- Kondylakis, H., Spanakis, E.G., Sfakianakis, S.G., Sakkalis, V., Tsiknakis, M.N., Marias, K., Xia, Z, Yu, H.Q., & Dong, F. (2015). Digital Patient: Personalized and Translational Data Management through the MyHealthAvatar EU Project. International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society (EMBC), 2015, Milan, Italy.
- Spanakis, E.G., Yang, P., Deng, Z., Sakkalis, V., Kafetzopoulos, D., Marias, K., Tsiknakis, M.N., & Dong, F. (2014). MyHealthAvatar: personalized and empowerment health services through Internet of Things technologies, 4th International Conference on Wireless Mobile Communication and Healthcare, Athens, Greece, November 3-5, 2014.
- Spanakis, E.G., Santana, S., Ben-David, B., Marias, K., & Tziraki, C. (2014). Persuasive technology for healthy aging and wellbeing. 4th International Conference on Wireless Mobile Communication and Healthcare, Athens, Greece, November 3-5, 2014.
- 8. **Spanakis, E.G.,** Sakkalis, V., Marias, K., & Tsiknakis, M.N. (2014). **Connection between Biomedical Telemetry and Telemedicine**. Handbook of Biomedical Telemetry. 2014/7/17 (pp. 419 444).
- 9. Spanakis, E.G., Sakkalis, V., Marias, K., Dong, F., & Tsiknakis, M.N. (2014). MyHealthAvatar: The digital patient perspective. 1st International Summer School on eCare Integrated, sustainable home care, organized August 25 29, 2014 in Ghent, Belgium, ("Best Poster Award").
- Spanakis, E.G.; Sakkalis, V.; Marias, K.; Traganitis, A. Cross Layer Interference Management in Wireless Biomedical Networks. Entropy — Open Access Journal, 16, 2085-2104. (Impact Factor 1.502)
- 11. Vavoulas, G., Pediaditis, P., Chatzaki, C, Spanakis, E.G., & Tsiknakis, M.N. (2014). The MobiFall Dataset: Fall Detection and Classification with a Smartphone. International Journal of Monitoring and Surveillance Technologies Research (IJMSTR), 2(1), 44-56, IGI Global.

- 12. **Spanakis, E.G.,** Kozyrakis, G. V., Spanoudaki, K., Alexandrakis, G., Marias, K., & Kampanis, N.A. (2014). Ανάπτυξη πρότυπου συστήματος αξιοποίησης πληροφοριών από τους πολίτες με μεθόδους crowd sourcing για την αντιμετώπιση και διαχείριση φυσικών καταστροφών. Πανελλήνιο Συνέδριο «Η χρήση των νέων τεχνολογιών στην πρόληψη και τη διαχείριση φυσικών καταστροφών Ο ρόλος της Πολιτικής Προστασίας»
- 13. Maniadi, E., Kondylakis, H., **Spanakis, E.G.**, Spanakis, M., Tsiknakis, M.N., Marias, K., & Dong, F. (2013). **Designing a digital patient avatar in the context of the MyHealthAvatar project initiative.** 13th IEEE International Conference on BioInformatics and BioEngineering (BIBE) 2013.
- 14. Manousos, D., Chiarugi, F., Kontogiannis, V., Karatzanis, I., Kouroubali, A., **Spanakis, E.G.**, Marias, K., Fursse, J., Thomson, S., Jones, R.W., Verma, V., & Clarke, M. (2013). **First results about the use of a patient portal by people with diabetes in a rural area**. E-Health and Bioengineering Conference (EHB), 2013.
- 15. Vavoulas, G., Pediaditis, M., Spanakis, E.G., & Tsiknakis, M.N. (2013). The MobiFall Dataset: An Initial Evaluation of Fall Detection Algorithms Using Smartphones. 6th IEEE International Symposium on Monitoring & Surveillance Research (ISMSR): Healthcare-Bioinformatics.
- Spanakis, E.G., and Voyiatzis, A.G. (2012). DAPHNE: A Disruption-Tolerant Application Proxy for e-Health Network Environments. 3rd International Conference on Wireless Mobile Communication and Healthcare, Paris, France, November 21-23, 2012.
- 17. **Spanakis, E.G.,** Chiarugi, F., Kouroubali, A., Spat, S., Beck, B., Asanin, S., Rosengren, P., Gergely, G.T., & Thestrup, J. (2012). **Diabetes Management Using Modern Information and Communication Technologies and New Care Models. i-JMR Interactive Journal of Medical Research**, 1(5). (*Impact Factor 5.7*)
- E. Spanakis, and Manolis Tsiknakis, "Delivery of secure eHealth services and communications" 2012
 International Conference on Telecommunication Systems, Modeling and Analysis (ICTSM2012), May 24-26, 2012, Prague, Czech Republic.
- 19. Karatzanis, I., Kontogiannis, V., **Spanakis, E.G.,** Chiarugi, F., Fursse, J., & Jones, R.W. (2012). **Empowering Patients through a Patient Portal for an Improved Diabetes Management**. 3rd International Conference on Wireless Mobile Communication and Healthcare November, Workshop on Advances in Personalized Healthcare Services, Wearable Mobile Monitoring, and Social Media Pervasive Technologies (APHS 2012).
- 20. **Spanakis, E.G.,** & Sakkalis, V. (2012). **Digital Information of the Citizens** (Τα ψηφιακά δεδομένα των πολιτών). The Economist (Kathimerini), (106), 39.
- 21. E. Spanakis, George Pallis and Marios D. Dikaiakos, "Graph Visualization Tool for Vehicular Ad-Hoc Networks" 2011 IEEE Vehicular Networking Conference (VNC 2011), November 2011, Amsterdam, The Netherlands.
- 22. E. Spanakis and F. Chiarugi, "Diabetes Management: Devices, ICT Technologies and Future Perspectives", 2nd International ICST Conference on Wireless Mobile Communication and Healthcare, MobiHealth 2011, Kos Island, Greece, October 2011.
- 23. S. Spat, B. Holl, P. Beck, F. Chiarugi, V. Kontogiannis, M. Spanakis, D. Manousos and T. Pieber, "A Mobile Android-based Application for in-hospital Glucose Management in compliance with the Medical Device Directive for Software", 2nd International ICST Conference on Wireless Mobile Communication and Healthcare MobiHealth 2011 Kos Island, Greece, October 2011.
- 24. E. Spanakis, Christodoulos Efstathiatdes, George Pallis and Marios D. Dikaiakos, "Real-Time Graph Visualization Tool for Vehicular Ad-Hoc Networks", 16th IEEE Symposium on Computers and Communications (ISCC 2011), June 2011, Corfu, Greece.
- 25. E. Spanakis, A. Traganitis, and A. Ephremides, "Cross Layer Multicast Rate Adaptation in Wireless Networks", Euro-NF International Workshop on Traffic and Congestion Control for the Future Internet, Volos, Greece, 31 March 1 April 2011.
- 26. M. Tsiknakis and M. Spanakis, "Adoption of of innovative eHealth services in prehospital emergency management: a case study", 10th IEEE International Conference on Information Technology and Applications in Biomedicine (ITAB), November 2010, Corfu, Greece.
- 27. E. Spanakis, A. Traganitis, and A. Ephremides, "Rate Region and Power Considerations in a simple 2x2 Interference Channel", Information Theory Workshop on Networking and Information Theory, June 2009, Volos, Greece.
- 28. E. Spanakis and A. Traganitis, "Applying the Time-To-Live Parameter in On Demand Route Caching in MANETs", 11th International Conference on Advanced Communication Technology (ICACT), February 2009, Phoenix Park, KOREA.

- 29. M. Tsiknakis, A. Traganitis, M. Spanakis, and S.C. Orphanoudakis, "Wireless Communication Technologies for mobile Healthcare Applications: Experiences and Evaluation of security related issues", In M-Health, Emerging Mobile Health Systems Series: International Topics in Biomedical Engineering, R. Istepanian, S. Laxminarayan, C. Pattichis, (Eds.), Springer, 2006, ISBN: 0-387-26558-9, pp. 65-80.
- 30. M. Spanakis, P. Lelis, F. Chiarugi, C. Chronaki and M. Tsiknakis, "R&D challenges in developing an ambient intelligence eHealth platform", 3rd European Medical and Biological Engineering Conference, IFMBE European Conference on Biomedical Engineering, Prague, Czech Republic, November 20-25, 2005.
- 31. Maria Papadopouli, Haipeng Shen and Manolis Spanakis, "Characterizing the duration and association patterns of wireless access in a campus", 11th European Wireless Conference, Nicosia, Cyprus, April 10-13, 2005.
- 32. Maria Papadopouli, Haipeng Shen and **Manolis Spanakis**, "Modeling client arrivals at access points in wireless campus-wide networks", 14th IEEE Workshop on Local and Metropolitan Area Networks, Chania, Crete, Greece, September 18-21, 2005. (*ranked fourth best paper in the reviewing process*)
- 33. F. Chiarugi, D. Trypakis and M. Spanakis, "Problems and Solutions for Storing and Sharing Data from Medical Devices in eHealth Applications", presented at the 2nd OpenECG Workshop, 1-3 April 2004 Berlin.
- 34. F. Chiarugi, M. Spanakis, P.J. Lees, C.E. Chronaki, M. Tsiknakis and S.C. Orphanoudakis, "ECG in Your Hands: A Multi-Vendor ECG Viewer for Personal Digital Assistants", presented at Computers in Cardiology 2003, 21-24 September, Chalkidiki, Greece.
- 35. CE Chronaki, F Chiarugi, E Mavrogiannaki, C Demou, P. Lelis, D Trypakis, M Spanakis, M Tsiknakis and SC Orphanoudakis, "An eHealth Platform for Instant Interaction among Health Professionals", Computer in Cardiology 2003, Thessalonica, Greece, September 2003.
- 36. Chiarugi F, **Spanakis M**, Lees PJ, Tsiknakis M, Traganitis A and Orphanoudakis SC, "Remote Multiparametric Monitoring in a Regional HealthNetwork", Proceedings of the 2nd European Medical & Biological Engineering Conference, Vienna, December 2002.
- 37. Chiarugi F, **Spanakis M**, Lees PJ, Chronaki CE, Tsiknakis M, Traganitis A and Orphanoudakis SC, **"Real-Time Cardiac Monitoring Over A Regional Health Network: Preliminary Results From Initial Field Testing"**, Proceedings of Computer in Cardiology 2002, Memphis, USA, September 2002.
- 38. Traganitis A, Trypakis D, Spanakis M, Condos S, Stamkopoulos T, Tsiknakis M and Orphanoudakis SC, "Home monitoring and Personal Health ManagementServices in a Regional Health Telematics Network", Proceedings of the 23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Istanbul, October 2001

Invited Talks

"Personalized and Empowerment Services through the MyHealthAvatar Platform: A personal digital health related collection bag", HL7 Hellas Workshop at ICIMTH 2016, 1-3 July 2016, Athens, Greece.

"The future of Health is Digital", 2nd Athens Science Festival: Science and Technology from theory to practice, Technopolis, City of Athens, 17th-22nd March 2015.

"Cross Layer Rate Adaptation in Wireless Ad-hoc Networks", Colloquium: University of Cyprus, Cyprus, October 4, 2010.

"Wearable Ambient Intelligence eHealth platforms", KM in AMI Workshop - Bringing Knowledge Management tools to the emerging world of Ambient Intelligence infrastructures, Bruxelles, October 14 – 15, 2004.

Research Experience

Computational BioMedicine Laboratory (CBML), FORTH, Greece

Position: Collaborating Researcher (November 2011 – today)

Post-doctoral Research Fellow (January 2011-October 2011) (http://www.ics.forth.gr/cml/index_main.php?l=g&c=631)

Description of work:

- SpeechXRays (Principal Investigator)

Multi-channel biometrics combining acoustic and machine vision analysis of speech, lip movement and face. The SpeechXRays project will develop and test in real-life environments a user recognition platform based on voice acoustics analysis and audio-visual identity verification. SpeechXRays will outperform state-of-the-art solutions in the following areas: • Security: high accuracy solution (cross over accuracy1 of 1/100 i.e. twice the commercial voice/face solutions) • Privacy: biometric data stored in the device (or in a private cloud under the responsibility of the data subject) • Usability: text-independent speaker identification (no pass phrase), low sensitivity to surrounding noise • Cost-efficiency: use of standard embedded microphone and cameras (smartphones,

laptops) The project will combine and pilot two proven techniques: acoustic driven voice recognition (using acoustic rather than statistical only models) and multi-channel biometrics incorporating dynamic face recognition (machine vision analysis of speech, lip movement and face). The vision of the SpeechXRays project is to provide a solution combining the convenience and cost-effectiveness of voice biometrics, achieving better accuracies by combining it with video, and bringing superior anti-spoofing capabilities. The technology will be deployed on 2000 users in 3 pilots: a workforce use case, an eHealth use case and a consumer use case. The project lasts 36 months and is coordinated by world leader in digital security solutions for the mobility space

- MyHealthAvatar: (ww.myhealthavatar.eu) Principal Investigator

A Demonstration of 4D Digital Avatar Infrastructure for Access of Complete Patient Information, MyHealthAvatar will be built on the latest ICT technology with an aim of engaging public interest to achieve its targeted outcomes. In addition to data access, it is also an interface to access integrative models and analysis tools, utilizing resources already created by the VPH community. Overall, it will contribute to individualized disease prediction and prevention and support healthy lifestyles and independent living.

(March 2013 – February 2016)

- REACTION: Remote Accessibility to Diabetes Management and Therapy in Operational healthcare Networks (http://www.reactionproject.eu/).

The REACTION platform will present an interoperable peer-to-peer communication platform, for the long term management of diabetes using on wearable, continuous blood glucose monitoring sensors and automated closed-loop delivery of insulin, based on Service Oriented Architecture (SoA) and cloud-enabling middleware.

(March 2010 – February 2014)

- eu-Domain: Enabling users for-Distance-working & Organizational Mobility using Ambient Intelligence service Network.

(April 2004 – September 2007)

- Twister: Terrestrial Wireless Infrastructure integrated with Satellite Telecommunications for E-Rural applications.

(March 2004 – September 2007)

- ATTRACT: Applications in Telemedicine taking rapid advantage of cable television network evolution

(January 2000 - December 2002)

- HYGEIAnet: Crete-A telematic center (January 2001 - December 2003)

- Biomedical Informatics e-health system (design and implementation):
 - O <u>Remote Care:</u> A remote patient monitoring platform for various clinical scenarios, supporting telemonitoring and telemanagement of patients by a distant expert. The platform is able to operate various medical components. <u>Medical Devices:</u> Software components (Stethoscope Vital Sign Monitor (emergency care), Spirometer, SpO₂ meter, EEG, Electronic Scale), for <u>real time acquisition</u> and <u>transmission</u> of medical data from various medical devices over wireless and wired IP networks. Modular design allows medical devices to be operable over an ambient intelligence environment.
 - O <u>Pocket Network Auscultation</u>: Software and hardware component able to acquire in real-time the acoustic signal, from a handheld device, and transmit it through a wireless network to a remote end where it is sent to the line-out port of a soundcard, and play backed to using a stethoscope earphone attached. A common stethoscope was used, fitted with a microphone, connected to the microphone-input of the PDA. Different kinds of FIR band pass filters were designed, developed and tested extensively in order to come up with the best corner frequencies. This device was tested and validated under real scenarios and medical examinations with in region of the health telematic network of Crete HYGEIAnet.

High Performance Computing Systems Laboratory (HPCL), Department of Computer Science, University of Cyprus

Position:

Marie Curie Post-doctoral fellow

Description of work:

- Study interference phenomenon in VANETs and provide insights on higher layer parameters can affect connectivity (i.e. minimize delay, overhead, and maximize aggregate rate by maximizing the number of simultaneous transmissions and individual transmission link rates.
- Design and implementation of a visualization tool presenting, in real time, VANET connectivity graphs, using realistic mobility traces. (August 2010 – December 2010)

Telecommunications and Networks Laboratory (TNL), FORTH, Greece

Position: Research Assistant

Description of work:

- Research on cross layer rate adaptation in wireless ad-hoc networks when multiple uncoordinated links share a common medium and the effect of interference is present, limiting network performance, Advisor: Prof. Apostolos Traganitis.

(January 2006 – November 2009)

- Research Performance analysis and modeling of mobile, wireless, ad hoc networks, Advisor: Prof. Apostolos Traganitis.

(January 2002 – January 2005)

- OPNET simulation studies on Routing Protocol (DSR, AODV) in wireless mobile ad-hoc networks, Advisor: Prof. Apostolos Traganitis.

(January 2002 – January 2009)

The Institute for Systems Research (ISR), University of Maryland (UMD), USA

Position: Research Assistant

Description of work:

work:

Study on cross-layer techniques in the design and study of wireless ad hoc networks. Focus on finding how adapting various parameters of the telecommunication system can allow concurrent transmissions, minimize interference, enhance network throughput, maximize individual link data rates, and optimally utilize the network resources for all competing transmissions.

Advisor: Prof. Antony Ephremides. (March 2006 – December 2006)

Wireless Measurement Group, Computer Science Department, University of North Carolina, USA

Position: Research Intern

Description of Measurements of

Measurements of wireless networks performance, characterizing mobility and access patterns in an

IEEE802.11 wireless network infrastructure. Supervisor: Prof. Maria Papadopouli

(March 2004 - December 2005)

Mobile Computing Group, TNL, FORTH, Greece

Position: Group member (September 2004 – March 2005)

(http://www.ics.forth.gr/mobile/)

Conferences Attended

eHealth 360° International Summit, June 14 - 16, 2016 in Budapest, Hungary.

MobiHealth 2015, 5th International Conference on Wireless Mobile Communication and Healthcare - London, UK

1st International Summer School on eCare - Integrated, sustainable home care, August 25 - 29, 2014 in Ghent, Belgium.

MobiHealth 2014, 4th International ICST Conference on Wireless Mobile Communication and Healthcare - Athens Greece

MobiHealth 2012, 3rd International ICST Conference on Wireless Mobile Communication and Healthcare - Paris France

MobiHealth 2011, 2nd International ICST Conference on Wireless Mobile Communication and Healthcare - Kos Island, Greece

Summer School on Information Theory, Technical University of Crete, July 2010, Chania, Crete, Greece.

NATO ASI advance course on Coding and Analysis of Multiple Access Channels, Budapest, Hungary, September 2006.

40th Annual Conference on Information Sciences and Systems (CISS 2006), Electrical Engineering, Princeton University, March 2006.

Ready To Launch Workshop, Visual Studio 2005, SQL Server 2005, BizTalk Server 2006, Athens, Greece, 6 December, 2005.

3rd European Medical and Biological Engineering Conference, IFMBE European Conference on Biomedical Engineering, Prague, Czech Republic, November 20-25, 2005.

14th IEEE Workshop on Local and Metropolitan Area Networks, Chania, Crete, Greece, September 18-21, 2005.

2nd meeting of the Greek e-Health Forum, Heraklion, Crete, Greece - 28 April 2001.

The 1st OpenECG Workshop, Crete, Greece, 10-12 October 2002.

Mobile Health Care 2002, Medical Records Institute, Las Vegas October 16-18, 2002.

1st Cretan Regional Congress: "Innovation & Health in the 21st Century", Heraklion, Crete, Greece - December 12-13, 2003.

Teaching Experience

Network Technology and Programming advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)

Spring 2017

"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Spring 2016
"Multimedia eHealth Services in Biomedicine" advanced-undergrad/grad course, Informatics Engineering of the Technological Educational Institute of Crete (Visiting Lecturer)	Fall 2015
"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Spring 2015
"Multimedia eHealth Services in Biomedicine" advanced-undergrad/grad course, Informatics Engineering of the Technological Educational Institute of Crete (Visiting Lecturer)	Fall 2014
"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Spring 2014
"eHealth" advanced-undergrad/grad course, Informatics Engineering of the Technological Educational Institute of Crete (Visiting Lecturer)	Fall 2014
"Multimedia applications in Biomedicine" advanced-undergrad/grad course, Engineering of the Technological Educational Institute of Crete (Visiting Lecturer)	Spring 2014
"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Fall 2013
"eHealth" advanced-undergrad/grad course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Visiting Lecturer)	Fall 2013
"Multimedia applications in Biomedicine" advanced-undergrad/grad course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Visiting Lecturer)	Spring 2013
"eHealth" advanced-undergrad/grad course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Visiting Lecturer)	Fall 2012
"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Spring 2012
"Network Technology and Programming" advanced-undergrad/grad course, Computer Science Department, University of Crete (Visiting Lecturer)	Spring 2011
"Digital Design" course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Spring 2009
"Programming" course, Computer Science Division, Technological Education Institute of Crete (Teaching Assistant)	Spring 2009
"Telecomunications and Networks" course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Teaching Assistant)	Fall 2008
"Digital Design" course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Fall 2008
"Scientific Writing/Computer Science" course, Computer Science Division, Technological Education Institute of Crete (Laboratory Fellow)	Fall 2008
"Introduction to Telecomunication Theory" course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2008
"Telecomunications and Networks" graduate course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Spring 2008
"Digital Design" course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Spring 2008
"Introduction to Telecomunication Theory" course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2008
"Telecomunications and Networks" graduate course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Fall 2007
"Digital Design" course, Applied Informatics and Multimedia Department, Technological Education Institute of Crete (Laboratory Fellow)	Fall 2007
"Introduction to Telecomunication Theory" course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2007

"Telecomunications Lab" course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2007
"Introduction to Telecomunication Theory", Computer Science Department, University of Crete (Teaching Assistant)	Fall 2006
"Telecomunications Lab" graduate course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2006
"Mobile Computing and Wireless Networks" graduate course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2005
"Mobile Computing and Wireless Networks" graduate course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2005
"Medical Informatics" graduate course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2004
"Computer Networks" course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2003
"Digital Communications and Networks" graduate course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2003
"Programming" course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2002
"Digital Design" course, Computer Science Department, University of Crete (Teaching Assistant)	Spring 2001
"Digital Design" course, Computer Science Department, University of Crete (Teaching Assistant)	Fall 2001

Last update June 2017