Vassilis Papataxiarhis

Nationality: Greek Marital status: Married Date of Birth: December, 5th, 1983 Military service: Fulfilled

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Education

March 2012 – today	PhD Candidate in the Dpt. of Informatics and Telecommunications of National and Kapodistrian University of Athens.
	<i>Thesis title</i> : «Knowledge discovery and machine learning in pervasive computing environments».
	Supervising Committee: Stathes Hadjiefthymiades (supervisor), Manolis Koubarakis, Evangelos Zervas.
December 2008	M.Sc. in «Advanced Information Systems» in the Dpt. of Informatics and Telecommunications of National and Kapodistrian University of Athens.
	Score: «Excellent» («8.86»).
June 2006	B.Sc. in the Dpt. of Informatics and Telecommunications of National and Kapodistrian University of Athens.
	Score: «Very Good» («8.04»).
2001	High School Graduation.
	Score: «Excellent» («19.5»).

Awards

Best performance award in "Advanced Information Systems" Postgraduate studies in the Dpt. of Informatics and Telecommunications for the academic year 2005-06. Score: «Excellence» («8.82»)

Programming skills			-
Java – JSP – JSF	Unity – Vuforia – Unreal	Swing – OSGi	PostGIS – ArcGIS
JS - HTML5 – XML	C++ – C – Pascal	Matlab – R	Prolog – Golog
Web Services (SOAP, REST API)	RDF(S) – OWL(S) – SPARQL – SWRL – RQL	SQL (MySQL, Oracle DBMS, SQL Server)	OGC Standards (SWE, SensorML, SOS)

Skills

- Author of more than 20 scientific articles published in international journals and conferences.
- Evaluator of COST Actions (<u>http://www.cost.eu/</u>) as a Rapporteur and Individual Expert.
- Evaluator in national and international scientific conferences and journals.
- Evaluator in the Open Calls of the StandICT EU-funded project.
- Member of the Pervasive Computing Research Group (part of the Communication Networks Laboratory, CNL) of the Dpt. of Informatics and Telecommunications of the University of Athens.
- Supervisor of more than 15 B.Sc. and M.Sc. theses.
- Teaching experience in graduate courses ("Object Oriented Programming", "Operating Systems") and postgraduate courses ("Internet Technologies and E-Commerce", "Multimedia and Hypermedia", "Novel Services and Technologies") in the Dpt. of Informatics and Telecommunications (University of Athens).

ork experience	
January, 2007 – today	National and Kapodistrian University of Athens – <u>Pervasive Computing Research Group (p-comp)</u> Participation in the technical management of R&D projects, writing a consolidation of research and innovation proposals for funding, system desi and development in the context of EU-funded and national projects (e. Horizon 2020, FP7).
	[May, 2017 – today] H2020 SEC EU-funded project – ROBORDER (Autonomous swarm heterogeneous robots for border surveillance). ROBORDER aims developing and demonstrating a fully-functional autonomous bord surveillance system with unmanned mobile robots including aerial, wat surface, underwater and ground vehicles which will incorporate multimod sensors as part of an interoperable network.
	<u>Web</u> : <u>https://roborder.eu/</u> <u>Personal involvement</u> : Technical management, Risk models, Mission Planne
	[January, 2016 – April, 2017] DG-ECHO EU-funded project - E-PRES (Monitoring and Evaluation Natural Hazard Preparedness at School Environment). E-PreS project focus on the prevention phase against natural hazards. The main goal of E-PreS the design and evaluation of drills and exercises that are an extreme important part of emergencies mitigation. It will help school staff a students to understand any hazard effect and be prepared to rea appropriately.
	<u>Web</u> : <u>http://e-pres.di.uoa.gr/</u> <u>Personal invol;vement</u> : use of indoor positioning technologies (RFID) for t evaluation of evacuation plans in school buildings. Development of e-learni platform.
	[January, 2015 – December, 2015] H2020 FIRE+ EU-funded project - RAWFIE (Road-, Air-, Water-based Futu Internet Experimentation). The project aims at providing research facilitie for Internet of Moving Things (IoMT) devices. The project introduces a unique platform across the space and technology by integrating numerous test be of unmanned vehicles for research experimentation in vehicular, aerial a

maritime environments.

Web: http://www.rawfie.eu/

<u>Personal involvement</u>: Management of Open Calls and of the contractual agreements between the project coordinator (UoA) and external Third Parties.

[January, 2013 - September, 2015]

Participation in the national Cooperation project MARIBRAIN («Ship's Health Condition, Operational Status and Performance Remote Monitoring Based on Wireless Sensor Network and Technical Experience Management System»). The goal of the project is to develop a smart wireless sensor network platform that can be used to monitor a ship status on a 24-7 basis, to apply condition based monitoring (CBM) models and services to a maritime company and to allow a maritime company to operate in an environmental friendly way.

Web: http://www.maribrain.prismaelectronics.eu/index.php/en/

<u>Personal involvement</u>: RDBMS management, σχεδιασμός knowledge extraction from sensor data, real-time data stream management. Used technologies: Java, Oracle Enterprise Manager 11g, Matlab, WEKA tool.

[January, 2012 – June, 2015]

Participation in national Thales project SWeFS (Sensor Web Fire Shield). The Sensor Web Fire Shield (SWeFS) research project aims at delivering: (i) a methodology for developing a novel Sensor Web platform for dynamic datadriven assimilation (DDDAS) for securing the Wildland-Urban Interface (WUI) zones against environmental risks, and, (ii) a prototype DDDAS system specifically optimized/tuned for addressing the serious threat of forest fires in Greece. SWeFS calls for multidisciplinary research in the areas of sensor networks, distributed vision systems, remote sensing, geographical information systems (GIS), data stream fusion, space-time predictive modeling and control systems.

Web: http://thales-swefs.di.uoa.gr/

<u>Personal involvement</u>: data models for sensors, development of data fusion engine, data stream management. Implementation technologies: Java, SensorML, RDF(S), OWL2.

[May, 2011 – April, 2015]

FP7 Security EU-funded project - IDIRA (Interoperability of Data and Procedures in Large-scale Multinational Disaster Response Actions). IDIRA is a research project funded by the European Commission for a duration of four years (2011-2015), gathering eighteen partners to focus on the interoperability of data and emergency procedures in response to large-scale disasters.

Web: http://www.idira.eu/

<u>Personal involvement</u>: data modeling for disasters, resources and sensors, development of Decision Support System, data fusion engine. Implementation technologies: Java, OSGi, XML, RDF(S), OWL2.

[May, 2008 – February, 2011]

FP7 ICT EU-funded project - IPAC (Integrated Platform for Autonomic Computing). The IPAC aims at delivering a middleware and service creation environment for developing embedded, intelligent, collaborative, contextaware services in mobile nodes. IPAC relies on short range communications for the ad hoc realization of dialogs among collaborating nodes. Advanced sensing components leverage the context-awareness attributes of IPAC, thus rendering it capable of delivering highly innovative applications for mobile

	and pervasive computing.
	<u>Web</u> : <u>http://ipac.di.uoa.gr/</u> <u>Personal involvement</u> : platform architect and senior software engineer, middleware implementation in mobile nodes. Implementation technologies: Java, OSGi, XML, RDF(S), OWL, Prolog.
	[July, 2006 – January, 2008] Participation in national project - MNISIKLIS: Advanced Universal Location- based Services for Indoor Environments. The project targets the development of an integrated system for the provisioning of location-based services (e.g., navigation) in indoor and mixed environments. The project adopts a Design4All approach covering disabled users as well.
	<u>Web</u> : <u>http://speech.di.uoa.gr/mnisiklis/</u> <u>Personal involvement</u> : junior software engineer. Implementation texhnologies: Java, XML, OWL, SWRL, GIS, PostgreSQL, HTML, XForms.
January, 2015 – October, 2015	Hellenic Army – KE.P.Y.E.S. Military service in the Information support centre of Hellenic Army (KEPYES). Design and development of Web applications SDEP and JSDEP. Web: http://www.army.gr/default.php?pname=kepyes Personal involvement: Secured system access, use of Java, web services, SOAP, RESTful API, Java Swing, Oracle Database Manager 11g technologies.
January, 2011 – December,2013	MOBICS S.A. Research project «Busfinder». Busfinder offers an easy and efficient tool to optimize inner city transit by means of public transportation. Its basic feature and benefit is using real-time passenger and vehicle positioning and velocity data, through a fleet management system.
	<u>Web</u> : <u>http://www.busfinder.gr/</u> <u>Personal involvement</u> : generation of GTFS (General Transit Feed Specification) feeds for the Attica region, development and customization of routing algorithms, preference- and history-based personalization, real-time data integration. Basic technologies and frameworks: Java, PostgreSQL, GTFS feeds, XML, RDF(S), OWL2.

Language skills

English (Excellent) • Spanish (Advanced)

Selected publications

V. Papataxiarhis, K. Filios, and S. Hadjiefthymiades, "Near-optimal assignment of complex tasks for Green Wireless Sensor Networks", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018), Limassol, Cyprus, October 15-17, 2018.

V. Papataxiarhis, S. Hadjiefthymiades, "Event correlation and forecasting over highdimensional streaming sensor data", 2018 IEEE 14th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2018), Limassol, Cyprus, October 15-17, 2018.

V. Papataxiarhis, "Optimal Task Assignment in Wireless Sensor Networks", 17th IEEE International Conference on Mobile Data Management (MDM2016), PhD Forum, Porto, Portugal, June 13-16, 2016.

V. Papataxiarhis, V. Tsetsos, G. Valkanas, C. Kassapoglou-Faist, D. Piguet, S. Hadjiefthymiades, "A Reconfigurable Middleware for Context-Aware Applications in Autonomic Computing", IEEE 24th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC 2013) - Services, Applications and Business Track, London, United Kingdom, September 8th – 11th, 2013.

<u>V. Papataxiarhis</u>, V. Tsetsos, and S. Hadjiefthymiades, "A Knowledge Plane for Context-Aware Applications in Autonomic Computing", in the Proceedings of the 7th ACM International Conference on Pervasive Services (ICPS 2010), Berlin, Germany, July 13-15, 2010.

<u>V. Papataxiarhis</u>, V. Riga, V. Nomikos, O. Sekkas, K. Kolomvatsos., V. Tsetsos, P. Papageorgas, S. Vourakis, V. Xouris, S. Hadjiefthymiades, and G. Kouroupetroglou, "MNISIKLIS: Indoor Location Based Services for All", in the Proceedings of 5th International Symposium on LBS and TeleCartography, Salzburg, Austria, November 26-28, 2008.