

Anthony Karageorgos



Date of Birth: 10-Sep-1968
Gender: Male
Nationality: Greek
Affiliation: Assistant Professor, Technological Educational Institute of Thessaly, Greece

Place of Birth: Trikala-Greece
Marital status: Married
Children: 3
E-mail: karageorgos@computer.org

A. PROFESSIONAL EXPERIENCE

RESEARCH POSITIONS

01/13-09/15: **Scientific Coordinator.** Project: “[e-Furniture](#) - Dynamic Networking of Wood and furniture Manufacturing Enterprises using Intelligent Agent Technology”, run at Institute of Research and Technology – Thessaly ([I.RE.TE.TH](#)), jointly funded by EU and General Secretariat of Research and Technology (GSRT), Greece.

01/14-05/14: **Scientific Coordinator.** Project: “Tool Development for Adaptive Parameter Configuration of Internet Software”, run at [Technological Research Center of Thessalia](#), funded by ISOTEC Ltd.

09/10-12/12: **Scientific Coordinator.** Act “Innovation Coupons for Small and Medium-sized Enterprises”, Technological Research Centre of Thessaly, Greece. Coordinated execution of 9 innovation coupon projects each with duration of 5 months. Funded by General Secretariat of Research and Technology, Greece. Innovation coupon titles:

- “Supporting Operations of Agricultural SME Smart Business Networks using ICT technologies”
- “Innovative Material Management in Furniture Manufacturing Processes using Intelligent Software Technologies”
- “Dynamic Networking of Public Sector Organisations using Adaptive Software Tools”
- Intelligent Systems for Dynamically Adaptive and Personalised Advertising”
- “Dynamically Adaptive and Personalised Services using Self-Organising Software”
- “Dynamic Coordination of Soft-Drink Production and Delivery using ICT Technologies”
- “Innovative Textile Production Management Processes using Intelligent software technologies”

<ul style="list-style-type: none"> - "Improving Wood Sawmill Operations using Intelligent Optimisation Technologies" - "Proactive Medical Information Provision using Personalised Software technologies"
<p>07/12-12/13: Senior Marie-Curie Research Fellow. Project: "COMPOSER: COMposition and Management of POlymorphic SERvices". EU Marie-Curie Intra-European Fellowship for Career Development grant No. PIEF-GA-2011-301125. Centre of Service Research, Manchester Business School, University of Manchester, UK.</p>
<p>01/13-12/14: Research Associate. Project: "SPRINT SMEs: Research in Software Process Improvement Methodologies for Greek Small & Medium sized Software Development Enterprises (SMEs)", ACT: "Archimedes III: Supporting Research Groups at TEI", run at TEI of Thessaly, jointly funded by EU and the Ministry of Education, Greece.</p>
<p>01/13-12/14: Research Associate. Project: "Intelligent Testing of Material Quality for Packaging Paper Production", ACT: "Archimedes III: Supporting Research Groups at TEI", run at TEI of Thessaly, jointly funded by EU and the Ministry of Education, Greece.</p>
<p>03/06-03/07: Research Associate. Project: "<i>Sawmill Optimisation Software</i>", E-Efficiency Computer Applications, Greece.</p>
<p>03/04-12/05: Research Associate. Project: "<i>Dynamic Multi-Agent Systems Formation</i>". Act Pythagoras: "Supporting University Research Groups", University of Aegean, Greece.</p>
<p>09/02-12/03: Research Fellow (Grade II). Projects: "<i>Multi-Agent Business Environments (MABE)</i>" and "<i>Agentcities.NET</i>". Dept. of Computation, University of Manchester Institute of Science and Technology, UK.</p>
<p>01/94-12/95: Research Assistant. CLAIRE Research Group. Research Institute of Meteorology and Climatology. School of Geology, Aristotle University of Thessaloniki, Greece.</p>
<p>11/93-04/94: Research Assistant. HYDROSCOPE Project. Sector of Hydraulics. Dept. of Civil Engineering. Aristotle University of Thessaloniki, Greece.</p>
<p>09/90-09/92: Research Assistant. EPOCH Research Group. Research Institute of Meteorology and Climatology. School of Geology, Aristotle University of Thessaloniki, Greece.</p>
<p>ACADEMIC POSITIONS</p>
<p>01/14-today: Assistant Professor. "Introduction to Computing" and "CAD I". Dept. of Wood and Furniture Design and Technology, TEI of Thessaly, Greece.</p>
<p>03/12-12/13: Assistant Professor. "Computer Applications in Forestry and the Environment" and "Geographical Information Systems". Dept. of Forestry and Natural Environment Administration, TEI of Larissa, Greece.</p>
<p>09/06-03/12: Lecturer. "Introduction to Computing", "Computer Applications in Forestry" and "Applied Mathematics". Dept. of Forestry and Natural Environment Administration, TEI of Larissa, Greece.</p>
<p>02/04-08/06: Visiting Lecturer (PD 407). "Software Analysis and Design" undergraduate and postgraduate courses given in the MSc programme titled "Software Technology and Information Systems", Dept. of Comp. & Comm. Engineering, University of Thessaly, Volos, Greece.</p>

02/04-08/06: Visiting Lecturer (PD 407). “Software Engineering” and “Programming I” (C language) courses, Dept. of Computer & Information Technology, TEI of Lamia, Greece.
09/94-05/97: Visiting Lecturer . Programming languages and Operating Systems (C++, C, Fortran, Pascal, Unix). Department of Informatics, School of Technological Applications, Technological Educational Institute, Thessaloniki, Greece.

B. EDUCATION & SCIENTIFIC PROFILE

ACADEMIC DEGREES	
2003:	Ph.D. in Agent-based Systems Engineering . Dept. of Computation, UMIST, Manchester, UK. Thesis title: “ <i>Using Synthesis and Role Modelling to Reduce Complexity in Agent-based Systems Design</i> ”. BT grant No. ML816801/MH354166.
1995:	Shorter MBA in Finance and Accounting Management . Macedonian Group of Studies, Thessaloniki, Greece. In cooperation with Olympian University Foundation, Wilmington, USA.
1994:	M.Sc. in Computer Science . Department of Computer Science, University of Essex, Essex, UK.
1991:	B.Sc. in Applied Mathematics . Department of Mathematics, School of Positive Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece.
ACADEMIC AWARDS	
2012:	EU Marie-Curie Intra-European Fellowship for Career Development grant No. PIEF-GA-2011-301125. Project Title: COMPOSER: COMposition and Management of Polymorphic SERVICES
2002:	BT research award from BT research labs. Patent application title: “ <i>Multi-Agent System Design Using Role Models</i> ” by S.Thompson and A. Karageorgos, BT Case Ref. A26117 (Patent No. 02704934.5-2211-GB0201048).
2001:	IJCAI scholarship from the Sixth AAI/SIGART Doctoral Consortium, held in conjunction with IJCAI, Seattle, USA.
1999:	3 year PhD sponsorship from British Telecom (BT), UK.
1994:	Shorter MBA scholarship from Olympian University Foundation, Thessaloniki, Greece.
PUBLICATIONS	
1. BOOKS AND THESES	
1.1	Serugendo, G. D. M., M. P. Gleizes and A. Karageorgos , (eds). <i>Self-Organising Software: From Natural to Artificial Adaptation</i> . 2011, Springer Verlag: Berlin, October 2011.
1.2	Brueckner S., G. D. M. Serugendo, A. Karageorgos , and R. Nagpal, (eds). <i>Engineering Self-Organising Systems: Methodologies and Applications</i> . Lecture Notes in Computer Science, Vol. 3464. 2005, Springer Verlag: Berlin.
1.3	Serugendo, G. D. M., A. Karageorgos , O. F. Rana and F. Zambonelli, (eds). <i>Engineering Self-Organising Systems: Nature-inspired approaches to software engineering</i> . Lecture Notes in Computer Science, Vol. 2977. 2004, Springer Verlag:

Berlin.
1.4 Karageorgos, A. <i>Using Role modelling and Synthesis to Reduce Complexity in Agent-Based System Design</i> , PhD Thesis. Dept of Computer Science, University of Manchester Institute of Science and Technology (UMIST): Manchester, UK. 2003. pp. 219.
2. JOURNALS
2.1 Adamopoulos. S., A. Karageorgos , C. Passialis and M. Chavenetidou, 2011. Mathematical Approach for defining Juvenile-Mature Wood Transition Zone in Black Locust and Chestnut . <i>Wood and Fiber Science</i> , 43(3), pp. 336-342, ISSN: 07356161.
2.2 Serugendo, G.D.M., M.-P. Gleizes, and A. Karageorgos , 2006. Self-Organisation and Emergence in MAS: An Overview . <i>Informatica</i> , Special issue on "Hot Topics in European Agent Research II", 30, 1 (Jan 2006), pp. 45-54, ISSN: 0350-5596.
2.3 Hassas, S., Serugendo, G.D.M., Karageorgos, A. and C. Castelfranci, 2006. Self-Organising Mechanisms from Social and Business/Economics domains. <i>Informatica</i> , special issue on "Hot Topics in European Agent Research II", 30, 1 (Jan 2006), p. 63-71.
2.4 Serugendo, G.D.M., M.-P. Gleizes, and A. Karageorgos , 2005. Self-Organisation and Emergence in Multi-Agent Systems. <i>Knowledge Engineering Review</i> , 20, 2 (Jun 2005), p. 165-189.
2.5 Karageorgos, A. , Mehandjiev, N, Hämmerle, A. and G. Weichhart, 2003. Agent-Based Optimisation of Logistics and Production Planning. <i>Engineering Applications of Artificial Intelligence, Special Issue on Intelligent Manufacturing</i> , 16, 4, (June 2003), p. 335-348
2.6 Karageorgos, A. , S. Thompson and N. Mehandjiev, 2002. Agent-based system design for B2B electronic commerce, <i>International Journal of Electronic Commerce, Special Issue on Agent Technologies for B2B Electronic Commerce</i> , 7, 1, (Fall 2002), p. 59-90.
2.7 Karageorgos, A. , N. Mehandjiev and S. Thompson, 2002. RAMASD: A Semi-Automatic Method for Designing Agent Organisations, <i>Knowledge Engineering Review, Special Issue on Coordination and Knowledge Engineering</i> , 17, 4 (Fall 2002), p. 57-84.
2.8 D'Inverno, M. M. Luck, A. and UKMAS'01 members (incl A. Karageorgos), 2002. Practical and Theoretical Innovations in Multi-Agent Systems Research , <i>Knowledge Engineering Review</i> , 17, 3 (Summer 2002), pp. 295-301, ISSN: 0269-8889.
3. SELECTED BOOK CHAPTERS
3.1 Serugendo, G.D.M., M.P. Gleizes and A. Karageorgos , 2011. Self-Organising Systems: History and Definitions. In Serugendo, G.D.M., M.P. Gleizes and A. Karageorgos (eds). <i>Self-Organising Software: From Natural to Artificial Adaptation</i> . Springer Verlag: Berlin, To appear.
3.2 Serugendo, G.D.M., Foukia, N., Hassas, S., Karageorgos, A. , Mostefaoui, S.K., Rana, O.F., Ulieru, M., Valkenaers, P. and C. Van Aart, 2004. Self-Organisation: Paradigms and Applications. In Serugendo, G.D.M., Karageorgos, A., Rana, O.F., and F. Zambonelli (eds). <i>Engineering Self-Organising Systems: Nature-inspired approaches</i>

	to software engineering. LNAI 2977, Springer Verlag, p. 1-19.
3.3	Karageorgos, A. , and N. Mehandjiev, 2004. A Design Complexity Evaluation Framework for Agent-Based System Engineering Methodologies. In Omicini, A., Peta, P. and J. Pitt (eds), Engineering Societies in the Agents World (ESAW 2003), LNCS 3071, Springer Verlag, p. 258-274.
3.4	Georgousopoulos, C., Rana, O.F., and A. Karageorgos , 2003. Supporting FIPA Interoperability for Legacy Multi-Agent Systems. In Agent-Oriented Software Engineering IV, Fourth International Workshop (AOSE 2003), Melbourne, Australia, July 15, Giorgini, P., Müller, J.P. and J. Odell (eds), LNCS 2935, Springer, p. 167-184.
3.5	Karageorgos, A. , S. Thompson and N. Mehandjiev, 2003. Specifying Reuse Concerns in Agent System Design Using A Role Algebra. In Kowalczyk, R., Müller, J., Tianfield, H. and R. Unland (eds.), Agent Technologies, Infrastructures, Tools, and Applications for e-Services. LNAI 2592, Berlin-Heidelberg: Springer Verlag, p. 121-136.
	4. SELECTED REFEREED CONFERENCES AND WORKSHOPS
4.1	Gerogiannis V., E. Rapti, A. Karageorgos , and P. Fitsilis, "A Fuzzy Linguistic Approach for Human Resource Evaluation and Selection in Software Projects" to appear at the Fifth International Conference on Industrial Engineering and Operations Management (IEOM), Dubai, United Arab Emirates, March 3-5 2015.
4.2	Trigkas M., I. Papadopoulos, A. Karageorgos , E. Rapti and A. Sideras, "Consumers' research for an Innovative Business Networking Model in Greek Wood and Furniture Sectors," accepted at the 7 th Euromed Academy of Business Conference, Krinstiansand, Norway, September 18-19 2014.
4.3	Karageorgos, A. , N. Mehandjiev, and E. Rapti, "Supporting Sensing Enterprise Operations with Polymorphic Service Infrastructures," International Federation of Automatic Control (IFAC) conference, Invited Session on Digital and Sensing Enterprise Cape Town, South Africa, 24-29 August 2014.
4.4	Rapti, E., A. Karageorgos , and G. Ntalos, "Adaptive Constrained and Rule-based Product Bundling in Enterprise Networks" IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises, 12th Adaptive Computing (and Agents) for Enhanced Collaboration, June 23-25, Parma, Italy, 2014.
4.5	Karageorgos A. , N. Mehandjiev, and E. Rapti, " A Model for intelligent Adaptation and Evolution of Polymorphic Services " presented at the 6th IEEE International Conference on Service-Oriented Computing and Applications (SOCA), Kauai, Hawaii, 2013, pp. 30 – 37, ISBN 978-1-4799-2701-2.
4.6	Karageorgos, A. and E. Rapti, " Dynamic Generation of Personalized Product Bundles in Enterprise Networks ", On the Move to the Meaningful Internet Systems: OTM 2013 Workshops, Graz, Austria, 2013, pp. 207-218.
4.7	Gerogiannis, V., Karageorgos, A. Liu, L. and C. Tjortjis, 2013. Personalised Fuzzy Recommendation for High Involvement Products . IEEE Int'l Conference on Systems, Man and Cybernetics. Manchester, UK, 13-16 October 2013, pp. 4884 - 4890.
4.8	Wajid, U., Marin, C. and A. Karageorgos , 2013. Optimizing Energy Efficiency in The Cloud Using Service Composition and Runtime Adaptation Techniques . IEEE International Conference on Systems, Man and Cybernetics. Manchester, UK, 13-16

October 2013, pp 115-120.
4.9 Karageorgos, A. , N. Mehandjiev and E. Rapti, "Supporting Manufacturing Networks with Polymorphic Service Infrastructures", International Workshop on Innovative Service Infrastructures for Managing Manufacturing Networks , Berlin, Germany, 2013.
4.10 Karageorgos, A. , Avramouli, D., Ntalos, G., Tjortjis, C. and K. Vasilopoulou, 2010. Towards Agent-Based 'Smart' Collaboration in Enterprise Networks. In: Reddy, S. (ed.): Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE), 19th IEEE International Workshop on Agent Computing for Enterprise Collaboration., Larissa, Greece, 20-23 June, IEEE Computer Society Press, p. 35-40.
4.11 Karageorgos, A. , Avramouli, D., Tjortjis, C. and G. Ntalos, 2010. Agent-Based Digital Networking in Furniture Manufacturing Enterprises. Second International Conference on 'Networked Digital Technologies' (NDT 2010). Springer, Prague, Czech Republic (2010), pp. 381-395, F. Zavoral et al. (eds).
4.12 Hämmerle, A., Karageorgos, A. , Reitbauer, A. and M. Pirker, 2004. A Role-Based Infrastructure for Customised Agent System Development in Supply Networks. IEEE International Conference on Systems, Man and Cybernetics (SMC'2004), Hague, The Netherlands, 10-13 October, IEEE Press.
4.13 Karageorgos, A. , S. Thompson and N. Mehandjiev, 2002. Semi-Automatic Design of Agent Organisations. In Proceedings of ACM Symposium in Applied Computing, Special Track on Coordination Models, Languages and Applications, Madrid, Spain, March 10-14, ACM Press, p. 306-313.
5. PATENTS
5.1 Thompson S. (BT Exact Technologies) and A. Karageorgos , 2002. <i>Multi-Agent System Design Using Role Models</i> , BT Case Ref. A26117. European Patent Office Patent No. 02704934.5-2211-GB0201048.
PEER RECOGNITION
<ul style="list-style-type: none"> • Editorial Board Member: <ul style="list-style-type: none"> ○ ACM Transactions in Autonomous Adaptive Systems (ACM TAAS)
<ul style="list-style-type: none"> • Conference Steering and Program Committee Member: <ul style="list-style-type: none"> ○ IWUC'04,05,06, WI/IAT'04,05,06,07,08,09,10,11 ESAW'04,05,06,07,08,09, ESOA'03,04,05,06, MA4CS'05,06, EUMAS'05, IIT'06, DEST'07, SASO'07,11, ADAPTIVE'11, PERVASIVE'11, NDT'10, SSS'09, INTECH'11, AAMAS'06,07, WETICE-ACEC'10,11, ECMS'11, CSMR'11, IJCAI'11, ICDIM'11
<ul style="list-style-type: none"> • Reviewer <ul style="list-style-type: none"> ○ Engineering Applications of Artificial Intelligence, Knowledge Engineering Review, Web Intelligence and Agent Systems, Journal of Autonomous Agents and Multi-Agent Systems, Logistics Information Management, International Journal of Electronic Commerce, Concurrency and Computation, Journal of Agent-Oriented Software Engineering, Pervasive and Mobile Computing, ACM Symposium in Applied Computing

C. RESEARCH AREAS / CONTRIBUTIONS

Areas where research contributions were made by A. Karageorgos include the following:

SELF-ORGANISING SOFTWARE
<p>1. <i>Active contribution in Self-Organising Software</i> research. In the FP6 AgentLink NoE the need to start researching principles, mechanisms and methodologies for developing software with self-organisation and emergence capabilities was identified. Based on this initiative A. Karageorgos co-organised 2 international workshops titled “<i>Engineering Self-Organising Applications</i>” (see pub. 1.1 and 1.2 at previous page) and co-established the Self-Organisation in Multi-Agent Systems Technical Forum Group which held regular meetings at various locations around Europe from 2004 to 2008. This work continued with the establishment of the ACM Transactions in Autonomous Adaptive Systems Journal, where he has since served as an Associate Editor, and is going to be followed by a book on state-of-the art in this field to appear in late 2011. The industrial aspects of this work are tackled by the IEEE-IES Technical Committee in Industrial Informatics in which A. Karageorgos participates as well.</p>
AGENT-BASED COORDINATION AND MANAGEMENT
<p>2. <i>Contribution in agent-based enterprise coordination</i>. In the context of Multi-Agent Business Environment (MABE) FP6 project A. Karageorgos developed an approach for enterprise coordination based on agent contracting which received considerable accreditation in the technical and scientific communities and has been applied in numerous occasions (the respective publication, pub. 2.4 above, has so far received over 30 citations).</p>
AGENT-BASED SYSTEM DESIGN
<p>3. <i>Contribution in role-based agent system design</i> – during his PhD research sponsored by British Telecom Laboratories-UK, A. Karageorgos contributed towards an innovative approach for agent-based system design based on role-modelling. The approach was quite successful and resulted in a patent (pub. 5.1.) filed from BT Labs in 2002.</p>