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| Name | Dr. George Kakarontzas |
| Websites | http://teilar.academia.edu/GKakarontzas https://www.researchgate.net/profile/George_Kakarontzas https://gr.linkedin.com/in/george-kakarontzas-4533a05 |
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Education

Dr. George Kakarontzas has a PhD with honors in Quality Assurance of Component-Based Software Systems from the Informatics Department of the Aristotle University of Thessaloniki (Greece) and an MSc in Object-Oriented Software Technology with Distinction from the University of Brighton (UK). He is also a graduate of the Computer Science department of the Athens University of Business and Economics.

Current employment

George is an Associate Professor at the General Department of the University of Thessaly based on the city of Larissa. His knowledge area is “Software Engineering with emphasis on Architectural Components”. He teaches Software Engineering, Software Quality, Compilers and Mobile Devices Programming. In the past he has taught many courses including Object-Oriented Programming, Internet Programming and Distributed Systems. He has extensive teaching experience being a permanent professor of the Computer Science and Engineering department of the TEI of Thessaly since 2004.

Research Interests

George’s main research area is the area of Software Engineering, Software Architecture and Software Components, with a particular emphasis in both design (forward engineering) but also in reverse engineering (e.g. Software Architecture Reconstruction - SAR). In the past he has also done research in the area of Distributed Systems and more specifically research in the area of P2P grid systems.

Research publications

George publishes regularly in peer reviewed international journals and conferences in the area of software engineering and distributed computing. He has published as the main author or participated as a co-author in a number of such research publications. The list of publications (more recent first) is provided in the following table. Most of these papers are available for download as preprints from the author’s websites (<http://teilar.academia.edu/GKakarontzas> and https://www.researchgate.net/profile/George_Kakarontzas)

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| 37 | Conference [C25] | George Kakarontzas and Christina Pardalidou: “Improving Component Coupling Information with Dynamic Profiling”, accepted as a full paper for the proceedings of the 22nd Pan-Hellenic Conference on Informatics, ACM, 2018 https://doi.org/10.1145/3291533.3291576 |
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| 36 | Conference [C24] | Vassilis Gerogiannis, Panos Fitsilis, George Kakarontzas and Christian Born, "Handling Vagueness and Subjectivity in Requirements Prioritization", accepted as a full paper for the proceedings of the 22nd Pan-Hellenic Conference on Informatics, ACM, 2018 https://doi.org/10.1145/3291533.3291574 |
| 35 | Κεφάλαιο Βιβλίου [BC3] | Angelis L., Bohlouli M., Hatzistavrou K., Kakarontzas G., Lopez J., Zenkert J. (2018) The COMALAT Approach to Individualized E-Learning in Job-Specific Language Competences. In: Linnhoff-Popien C., Schneider R., Zaddach M. (eds) Digital Marketplaces Unleashed. Springer, Berlin, Heidelberg, 2018 https://doi.org/10.1007/978-3-662-49275-8_16 |
| 34 | Journal [J9] | Mahdi Bohlouli, Nikolaos Mittas, George Kakarontzas, Theodosios Theodosiou, Lefteris Angelis and Madjid Fathi: "Competence assessment as an expert system for human resource management: A mathematical approach", Expert Systems with Applications, Vol. 70, Pages 83–102, 15 March 2017 http://dx.doi.org/10.1016/j.eswa.2016.10.046 |
| 33 | Conference [C23] | Kyriaki Chatzistavrou, George Kakarontzas and Lefteris Angelis: "Fuzzy Grading for Adaptability in a Learning Platform", Proceedings of the 20th Pan-Hellenic Conference on Informatics PCI 2016, ACM, 2016 https://doi.org/10.1145/3003733.3003766 |
| 32 | Journal [J8] | George Kakarontzas and Vassilis C. Gerogiannis, "Handling Uncertainty During Services Ranking", International Journal of Services Computing, Vol. 4, No. 3, pp. 45-57, July-September 2016 http://dx.doi.org/10.29268/stsc.2016.4.3.4 |
| 31 | Journal [J7] | Eleni Constantinou, George Kakarontzas, Ioannis Stamelos: An automated approach for noise identification to assist software architecture recovery techniques. Journal of Systems and Software 107: 142-157 (2015) http://dx.doi.org/10.1016/j.jss.2015.05.065 |
| 30 | Journal [J6] | Eleni Constantinou, Athanasios Naskos, George Kakarontzas, Ioannis Stamelos: Extracting reusable components: A semi-automated approach for complex structures. Inf. Process. Lett. 115(3): 414-417 (2015) http://dx.doi.org/10.1016/j.ipl.2014.11.007 |
| 29 | Conference [C22] | George Kakarontzas, Vassilis C. Gerogiannis: An Intuitionistic Fuzzy Approach for Ranking Web Services under Evaluation Uncertainty, in proc. of the 2015 IEEE International Conference on Services Computing (SCC 2015), pp. 742-745, IEEE, 2015 |

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| | | http://dx.doi.org/10.1109/SCC.2015.105 |
| 28 | Conference [C21] | Elia Kouzari, Vassilis C. Gerogiannis, Ioannis Stamelos, George Kakarontzas: Critical Success Factors and Barriers for Lightweight Software Process Improvement in Agile Development - A Literature Review, in proc. of the 10th International Conference on Software Engineering and Applications, (ICSOFT-EA), vol. 1, pp. 151-159, 2015, http://dx.doi.org/10.5220/0005555401510159 |
| 27 | Conference [C20] | Nikolaos Mittas, George Kakarontzas, M. Bohlouli, Lefteris Angelis, Ioannis Stamelos, M. Fathi: ComProFITS: A web-based platform for human resources competence assessment, in proc. of the 6th International Conference on Information, Intelligence, Systems and Applications (IISA 2015), pp. 1-6, IEEE, 2015 http://dx.doi.org/10.1109/IISA.2015.7388113 |
| 26 | Book Chapter [BC2] | Bohlouli M., Ansari F., Kakarontzas G., Angelis L. "An Adaptive Model for Competences Assessment of IT Professionals", Book Chapter in Fathi M. (eds) Integrated Systems: Innovations and Applications. Springer, Cham, pp. 91-111, 2015 https://doi.org/10.1007/978-3-319-15898-3_6 |
| 25 | Conference [C19] | George Kakarontzas, Vassilis C. Gerogiannis, Stamatia Bibi and Ioannis Stamelos: "Estrangement Between Classes: Test Coverage-based Assessment of Coupling Strength Between Pairs of Classes", in proc. of the 9th International Conference on the Quality of Information and Communication Technologies, QUATIC 2014 (main track), IEEE, pp. 48-57 https://doi.org/10.1109/QUATIC.2014.13 |
| 24 | Conference [C18] | Stamatia Bibi, Vassilis C. Gerogiannis, George Kakarontzas and Ioannis Stamelos: "Ontology based Bayesian Software Process Improvement", in proc. of the 9th International Conference on Software Engineering and Applications (ICSOFT-EA 2014), pp. 568-575, 2014, http://dx.doi.org/10.5220/0005001505680575 |
| 23 | Conference [C17] | George Kakarontzas, Leonidas G. Anthopoulos, Despoina Chatzakou and Athena Vakali: "A Conceptual Enterprise Architecture Framework for Smart Cities - A Survey Based Approach", in proc. of the International Conference on e-Business (ICE-B 2014), pp. 47-54, 2014 http://dx.doi.org/10.5220/0005021400470054 |

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| 22 | Journal [J5] | George Kakarontzas, Eleni Constantinou, Apostolos Ampatzoglou, Ioannis Stamelos: "Layer Assessment of Object-Oriented Software: A Metric Facilitating White-Box Reuse", Journal of Systems and Software, vol. 86, no. 2, pp. 349–366, Elsevier, February 2013, http://dx.doi.org/10.1016/j.jss.2012.08.041 |
| 21 | Conference [C16] | Fotios Kokkoras, Konstantinos Ntonas, Apostolos Kritikos, George Kakarontzas and Ioannis Stamelos: "Federated Search for Open Source Software Reuse", in proceedings of the 38th EUROMICRO conference on Software Engineering and Advanced Applications (EUROMICRO SEAA) - Model-Based Development, Components and Services (MOCS) track, pp. 200-203, IEEE, 2012, http://dx.doi.org/10.1109/SEAA.2012.55 |
| 20 | Conference [C15] | George Kakarontzas, Ioannis Stamelos, Stefanos Skalistis and Athanasios Naskos: "Extracting Components from Open Source: The Component Adaptation Environment (COPE) Approach", in proceedings of the 38th Euromicro conference on Software Engineering and Advanced Applications (EUROMICRO SEAA) - Model-Based Development, Components and Services (MOCS) track, pp. 192 – 199, IEEE, 2012, http://dx.doi.org/10.1109/SEAA.2012.39 |
| 19 | Conference [C14] | Eleni Constantinou, George Kakarontzas, Ioannis Stamelos: "Towards Open Source Software System Architecture Recovery Using Design Metrics", in proceedings of the 15 th Panhellenic Conference on Informatics, pp. 166-170, IEEE, 2011, http://doi.ieeecomputersociety.org/10.1109/PCI.2011.36 |
| 18 | Conference [C13] | George Kakarontzas, Vassilis C. Gerogiannis, Ioannis Stamelos, Panagiotis Katsaros: "Elastic Component Characterization with Respect to Quality Properties: An Intuitionistic Fuzzy-Based Approach", in proceedings of the 15 th Panhellenic Conference on Informatics, pp. 270-274, IEEE, 2011, http://doi.ieeecomputersociety.org/10.1109/PCI.2011.27 , BEST Paper Award for PCI 201 |
| 17 | Conference [C12] | Eleni Constantinou, George Kakarontzas, Ioannis Stamelos: "Open Source Software: How Can Design Metrics Facilitate Architecture Recovery?", in proceedings of the 4th Workshop on Intelligent Techniques in Software Engineering, 2011, http://arxiv.org/abs/1110.1992 |
| 16 | Journal [J4] | George Kakarontzas, Ilias K. Savvas, Ioannis Stamelos: "Agents, clusters and components: A synergistic approach to the Grid Scheduling Process", Future Generation Computer Systems, vol. 27, no. 8, pp. 999-1010, Elsevier, October 2011, http://dx.doi.org/10.1016/j.future.2011.05.002 |

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| 15 | Journal [J3] | Apostolos Ampatzoglou, Apostolos Kritikos, George Kakarontzas, Ioannis Stamelos: "An empirical investigation on the reusability of design patterns and software packages", Journal of Systems and Software, vol. 84, no. 12, pp. 2265-2283, Elsevier, December 2011, http://dx.doi.org/10.1016/j.jss.2011.06.047 |
| 14 | Conference [C11] | Apostolos Kritikos, George Kakarontzas, Ioannis Stamelos: "A Semi-automated Process for Open Source Code Reuse", in proceedings of the 5 th International Conference on Evaluation of Novel Approaches to Software Engineering (ENASE), pp. 179-185, 2010 http://users.teilar.gr/~gkakaran/enase2010.pdf |
| 13 | Conference [C10] | George Kakarontzas, Ioannis Stamelos: "Component Recycling for Agile Methods", in proc. of the Seventh International Conference on the Quality of Information and Communications Technology (QUATIC), pp. 397-402, IEEE, 2010, http://doi.org/10.1109/QUATIC.2010.72 |
| 12 | Journal [J2] | George Kakarontzas, Panagiotis Katsaros, Ioannis Stamelos: "Component Certification as a Prerequisite for Widespread OSS Reuse", Electronic Communications of the EASST, vol. 33, 2010, http://journal.ub.tu-berlin.de/index.php/eceasst/article/view/449 |
| 11 | Journal [J1] | Anakreon Mentis, Panagiotis Katsaros, Lefteris Angelis, George Kakarontzas: "Quantification of interacting runtime qualities in software architectures: Insights from transaction processing in client-server architectures", Information & Software Technology vol. 52, no. 12, pp. 1331-1345, Elsevier, 2010, http://dx.doi.org/10.1016/j.infsof.2010.07.006 |
| 10 | Book Chapter [BC1] | I. Stamelos and G. Kakarontzas: "Architecture Knowledge Management in Open Source Communities", Book chapter 11 in "Software Architecture Knowledge Management: Theory and Practice", Ali Babar, M., Dingsøyr, T., Lago, P., Vliet, H. van (Eds.), pp. 199-215, Springer, ISBN: 978-3-642-02373-6, July 2009 http://dx.doi.org/10.1007/978-3-642-02374-3_11 |
| 9 | Conference [C9] | George Kakarontzas, Ioannis Stamelos, Panagiotis Katsaros: "Product Line Variability with Elastic Components and Test-Driven Development". in proceedings of the International Conferences on Computational Intelligence for Modelling, Control and Automation; Intelligent Agents, Web Technologies and Internet Commerce; and Innovation in Software Engineering, pp. 146-151, IEEE, 2008 http://doi.ieeecomputersociety.org/10.1109/CIMCA.2008.84 |
| 8 | Conference | Ilias K. Savvas, Dimitrios C. Tselios, George Kakarontzas: "Quality Interplay in Regular vs. Irregular Grid Topologies", IEEE 17th Workshop on Enabling |

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| | [C8] | Technologies: Infrastructure for Collaborative Enterprises, 2008 (WETICE '08), pp. 176 – 181, IEEE, 2008 http://dx.doi.org/10.1109/WETICE.2008.23 |
| 7 | Conference [C7] | George Kakarontzas, Panagiotis Katsaros, and Ioannis Stamelos: "Elastic Components: Addressing Variance of Quality Properties in Components", 33 rd Euromicro Conference on Software Engineering and Advanced Applications (EUROMICRO-SEAA 2007), pp. 31-38, IEEE, 2007 http://doi.ieeecomputersociety.org/10.1109/EUROMICRO.2007.29 |
| 6 | Conference [C6] | Ilias K. Savvas, George Kakarontzas: "On Resource Clustering Techniques for Grid Resource Discovery", 16th IEEE International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE 2007), pp. 302-307, IEEE, 2007 http://doi.ieeecomputersociety.org/10.1109/WETICE.2007.161 |
| 5 | Conference [C5] | Vassilis C. Gerogiannis, George Kakarontzas, Ioannis Stamelos: "A unified approach for software process representation and analysis", in proc. of the 2006 International Conference on Software and Data Technologies – ICSoft'06, pp. 127-132, 2006, http://users.teilar.gr/~gkakaron/icsoft2006.pdf |
| 4 | Conference [C4] | George Kakarontzas, Ioannis Stamelos: "A Tactic-Driven Process for Developing Reusable Components", in proc. of the 9th International Conference on Software Reuse (ICSR 2006), pp. 273-286, Springer, 2006 http://dx.doi.org/10.1007/11763864_20 |
| 3 | Conference [C3] | George Kakarontzas and Ilias K. Savvas: "Agent-Based Resource Discovery and Selection for Dynamic Grids" in proc. of the 15th IEEE International Workshops on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE'06), pp 195-200, IEEE, 2006, http://doi.ieeecomputersociety.org/10.1109/WETICE.2006.18 Best Paper Award for ETNGRID-WETICE'06 |
| 2 | Conference [C2] | George Kakarontzas and Spyros Lalis: "Dependable Global Computing with JaWS++", in proc. of the 2004 European Across Grids Conference, pp. 100-109, Springer, 2004, http://dx.doi.org/10.1007/978-3-540-28642-4_12 |
| 1 | Conference | George Kakarontzas and Spyros Lalis: "A Market-Based Protocol with Leasing Support for Globally Distributed Computing", in proc. of the 1st IEEE International Symposium on Cluster Computing and the Grid (CCGrid'01), pp. |

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| | [C1] | 562-567, IEEE, 2001, http://doi.ieeecomputersociety.org/10.1109/CCGRID.2001.923243 |
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Member of conference committees

George participated as a member in the committees of various conferences and workshops:

1. IEEE International Workshop on Quality Oriented Reuse of Software (QUORS)
2. Pan-Hellenic Conference in Informatics (PCI)
3. Joint workshops on Intelligent Methods for Software System Engineering (JIMSE 2012)
4. 6th International Workshop on Foundations and Techniques for Open Source Software Certification (OpenCert 2012)
5. 8th International Conference on the Quality of Information and Communications Technology (QUATIC)
6. International Conference on Model-Driven Engineering and Software Development (MODELSWARD)

He also reviewed articles for the following journals:

1. Journal of Systems and Software
2. Information and Software Technology
3. IEEE Transactions on Services Computing
4. IET Software

Distinctions

He has received the Best Paper Award for the following two papers:

1. George Kakarontzas, Vassilis C. Gerogiannis, Ioannis Stamelos, Panagiotis Katsaros: "Elastic Component Characterization with Respect to Quality Properties: An Intuitionistic Fuzzy-Based Approach", in proceedings of the 15th Panhellenic Conference on Informatics, pp. 270-274, IEEE, 2011, <http://doi.ieeecomputersociety.org/10.1109/PCI.2011.27>,
BEST Paper Award for PCI 201
2. George Kakarontzas, Ilias K. Savvas: Agent-Based Resource Discovery and Selection for Dynamic Grids. WETICE-ETNGRID 2006: 195-200,
<http://doi.ieeecomputersociety.org/10.1109/WETICE.2006.18>
Best Paper Award for ETNGRID'06

Research Groups

George is a member of the SWENG (Software Engineering Group) research group of the Aristotle University of Thessaloniki department of Informatics – <http://sweng.csd.auth.gr>

Research Projects

George participated in numerous research projects mostly funded from European Commission resources. Some of the most recent are the following:

1. ERASMUS+ COMALAT project for Adaptive Language Training which aims at the creation of a next generation online tool that will be used for online language training adaptable to the level and professional needs of the learners. For more information please consult COMALAT's website: <http://www.comalat.eu/index.html.en?lang=en>
2. Leonardo COMPROFITS project. ComProFITS aims at an approach and a respective online tool for managing the competences of employees as well as the competences of candidates for employment. For more information please consult ComProFITS website: <http://www.comprofits.eu/home>
3. George co-authored the original proposal and was the technical manager of the Aristotle University of Thessaloniki team for the OPEN-SME FP7 European project. The OPEN-SME project aimed at developing a set of methodologies, associated tools and business models centered on SME Associations, which enable software SMEs to effectively introduce Open Source Software Reuse practices in their production processes. In this scope, software reuse is regarded as the sharing of software modules across different development teams, organizations, and diverse application domains. For more information please consult <http://opensme.eu>.
4. Archimedes III EADIC project (Enterprise Architecture for Digital Cities). The purpose of this project concerns the investigation, determination and implementation of a common Enterprise Architecture, which can cover the particular needs of most (if not all) the different forms of digital/smart cities. For more information on EADIC project please consult the project's website: <http://eadic.teilar.gr/>
5. SPRINT SMEs project is implemented through the Operational Program "Education and Lifelong Learning" and is co-financed by the European Union (European Social Fund) and Greek national funds in the context of the R&D program "ARCHIMEDES III". The objective of SRPINT-SMEs project (Research in Software PRocess Improvement Methodologies for Greek Small & Medium sized Software Development Enterprises) is to propose and develop a practical framework for the improvement of software processes which take place in Small & Medium sized Software Development Enterprises (SW SMEs). For more information please consult the project's website: <http://sprint.teilar.gr/>

Software systems

George participated in the analysis, design and development of many software systems. Some recent ones are the following:

1. ComProFITS Human Resources Management Application: an Open Source JEE application (<https://bitbucket.org/comprofits/comprofitsapp>)
2. COMALAT application for unsupervised learning of foreign languages: This is an extension of the known LMS Sakai and is being currently developed with the use of the Spring framework and the Apache Wicket GUI components library. When finished it is planned to be open sourced.

3. COPE tool for analysis of programs: COPE is a Swing java-based application that is Open Source and can be used for the static analysis of java programs. It is available at <https://bitbucket.org/gkakaran/copewingapp>
4. Synergates: a Java Enterprise Edition application developed for the systematic evaluation and selection of qualified teaching staff at the Technological Educational Institute of Thessaly (<http://synergates.teilar.gr/> - In Greek).