



Associate Professor **Evangelia Kavakli**

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Personal Information

Nationality: Hellenic
Date of Birth: May 04, 1970

Languages

Greek (native)
English (excellent)
French (good)

Research Interests and Activities

- Requirements Engineering
- Privacy by Design
- Social Cyber Physical Systems Design
- Enterprise Modelling
- Cultural Informatics

Education

- 1995 - 1999 **PhD in Computation, UMIST, Manchester, UK**
Title of thesis: "Goal-Driven Requirements Engineering - Modelling and Guidance".
- 1993-1994 **MSc by research in Computation, UMIST, Manchester, UK**
Title of thesis: "Enterprise Modelling for Information Systems Development".
- 1987 - 1991 **BSc (Hons) in Computer Science, University of Crete, Iraklion, Greece**
Graduation grade 7.49 out of 10

Awards Received

- 1995 - 1997 The Engineering and Physical Sciences Research Council (EPSRC) grant.

Employment

- 2016 - today **Aegean University, Department of Cultural Technology and Communication, Lesvos, Greece**
Associate Professor of Informatics focusing on the Analysis and Design of Data Base Systems and Information Systems

- 2007 - 2016 **Aegean University, Department of Cultural Technology and Communication, Lesvos, Greece**
Assistant Professor of Informatics focusing on the Analysis and Design of Data Base Systems and Information Systems
- 2000 - 2007 **Aegean University, Department of Cultural Technology and Communication, Lesvos, Greece**
Lecturer of Informatics focusing on the Analysis and Design of Data Base Systems and Information Systems
- Apr – Aug’00 **Computer Technology Institute, Patras, Greece**
Project Manager
- Oct’99 – Mar’00 **FORTHnet S.A., Athens, Greece**
Project Manager
- 1993 – 1999 **UMIST, Manchester, UK**
 Full time *Research Assistant*
- 1991 – 1993 **KNOSSOS Technologies S.A., Iraklion, Greece**
 Full time *System Engineer*
- 1989 – 1991 **The Computer Center of the University of Crete, Iraklion, Greece**
 Part time *member of the Systems Support Team*

Research Projects

- 1994 – today
- *I-BiDaaS*: Industrial-Driven Big Data as a Self-Service Solution (EC, Horizon 2020)
 - *DISRUPT*: Decentralised architectures for optimised operations via virtualised processes and manufacturing ecosystem collaboration (EC, H2020-FOF)
 - *IDE Univers*: The Hellenic Geo-portal (EC, Interreg III B MEDOCC)
 - *OpenDance*: Open-editing cooperative platform for Web Dance (EC, SOCRATES:MINERVA)
 - *CHIRON*: Cultural Heritage Informatics Research Oriented Network (EC, Marie Curie Actions)
 - *WebDANCE*: Web Dance for All using advaNCEd E-learning tools (EU SOCRATES-MINERVA 2002)
 - Europe of Human Rights (EE CULTURE 2001)
 - Drystone Constructions (EU CULTURE 2000)
 - *ELEKTRA* (European Framework IV)
 - *MIGRATE* (UK EPSRC/SEBPC)
 - *ELKD* (European Framework IV)
 - *F3* (European ESPRIT III)

Extracurricular Activities

- 2001 – today
- Member of the *Program Committee* of a large number of International Conferences including:
- Exploring Modeling Methods for Systems Analysis and Development (*EMMSAD*), 2020
 - International Conference on Electronic Government and the Information Systems Perspective (*EGOVIS*), 2010-2020.

- IEEE International Conference on Research Challenges in Information Science (*RCIS*), 2012-2020.
- Advanced Information Systems Engineering (*CAiSE*), 2011- 2019.
- ACM Celebration for Women in Computing (*WomENCourage*), 2018, 2019
- International Workshop on Advances in Services DEsign based on the Notion of CApability (*ASDENCA*), 2014-2018.

Member of the *Program Board* of the:

- 14th IEEE International Conference on Research Challenges in Information Science (*RCIS 2020*), 20 - 22 May 2020, Limassol, Cyprus
- 26th International Conference on Advanced Information Systems Engineering (*CAiSE 2014*), 16-20 June 2014, Thessaloniki, Greece

2019 – today	Associate editor for the Requirements Engineering Journal (Springer-Verlag)
2017 – today	Member of the editorial board of the <i>Requirements Engineering Journal</i> (Springer-Verlag)
2001–today	Member of the Human Network of Cultural Informatics Member of the CIDOC Conceptual Reference Model (CRM) Special Interest Group
1994 –today	Independent reviewer to several journals including ACM Computing Reviews, The IEE Review – Software Engineering, Software and Systems Modeling (Springer), Journal of Systems and Software (Elsevier), Information and Software Technology (Elsevier) and Information Systems (Elsevier)
Sep’2013 – Mar’2014	Audit Committee member for the Greek General Secretariat of Research and Technology (GSRT)
1997–1999	Independent reviewer to a number of projects funded by the British Engineering and Physical Sciences Research Council (EPSRC)

Selected Publications

<i>Edited books</i>	Hoffer, J.A., Ramesh, V., Topi, H. (2017) <i>Modern Data Base Management</i> , Vaitis, M. and Kavakli, E. (Editors of the Greek Edition), Tziolas, Thessaloniki.
	Sampanikou, E. and Kavakli, E. (eds) (2008) <i>Aspects of Representation: Studies on Art and Technology – New Technologies in Contemporary Cultural Expression</i> , University of the Aegean, Mytilene.

**Book
Chapters**

Loucopoulos P., **Kavakli E.** (2016) Capability Oriented Enterprise Knowledge Modeling: The CODEK Approach. In: Karagiannis D., Mayr H., Mylopoulos J. (eds) *Domain-Specific Conceptual Modeling*, Springer, Cham, pp. 197-215.

Kalloniatis, C., **Kavakli, E.**, and Gritzalis, S. (2015) Addressing Privacy in Traditional and Cloud-Based Systems, in *Cloud Technology: Concepts, Methodologies, Tools, and Applications*, IRMA, IGI Global, pp. 1631-1659.

Cossiavelou, V., Bantimaroudis, P., **Kavakli, E.** and Illia, L. (2013) The Media Gatekeeping Model Updated by R and I in ICTs: The Case of Wireless Communications in Media Coverage of the Olympic Games, in *Advancements and Innovations in Wireless Communications and Network Technologies*, Bartolacci, M. & Powell, S. R. (Eds), IGI Global, pp. 262 – 288.

Kalloniatis, C., **Kavakli, E.** and Gritzalis, S. (2011) Designing Privacy Aware Information Systems, in *Software Engineering for Secure Systems: Industrial and Research Perspectives*, Mouratidis, H. (ed), Hershey, USA, IGI Global, pp. 212-231.

Kavakli, E. and Loucopoulos P. (2005) Goal Driven Requirements Engineering: Analysis and Critique of Current Methods, in *Information Modeling Methods and Methodologies*, John Krogstie, Terry Halpin and Keng Siau (eds), IDEA Group, pp. 102 - 124.

**Referred
Journals**

Loucopoulos, P., **Kavakli, E.** and Mascolo, J. (to appear) Requirements Engineering for Cyber Physical Production Systems: The e-CORE approach and its application, *Information Systems, Elsevier* (submitted December 2019).

Zhao, L. Loucopoulos, P., **Kavakli, E.** and Letsholo, K. (2019) User Studies on End-User Service Composition: A Literature Review and a Design Framework, *ACM Transactions on the Web*, Vol 13, No 3, pp 15:1-15:46.

Kourtis, G., **Kavakli, E.** and R. Sakellariou, R. (2019) A Rule-Based Approach Founded on Description Logics for Industry 4.0 Smart Factories, *IEEE Transactions on Industrial Informatics*, Vol 15, No 9, pp. 4888-4899

Dimitrakopoulos, G., **Kavakli, E.**, Loucopoulos, P., Anagnostopoulos, D. and Zographos, T. (2019) A capability-oriented modelling and simulation approach for autonomous vehicle management, *Simulation Modelling Practice and Theory*, Vol. 91, February 2019, pp. 28-47.

Kalloniatis, C., Pattakou, A., **Kavakli, E.**, and Gritzalis, S. (2017) Designing Secure and Privacy-Aware Information Systems. *International Journal of Secure Software Engineering (IJSSE)*, Vol. 8, No 2, pp.1-25.

Kavakli, E., Kalloniatis, C., Mouratidis, H. and Gritzalis, S. (2014) Privacy as an integral part for the implementation of cloud solutions, *The Computer Journal*, Oxford University Press Vol 58, No 10, pp. 2213-2224.

Kalloniatis, C., Mouratidis, H., Manousakis, V., Islam, S., Gritzalis, S., **Kavakli E.** (2014), Towards the design of secure and privacy-oriented Information Systems in the Cloud: Identifying the major concepts, *Computer, Standards and Interfaces*, Vol 36, No 4, pp. 759–775. (1ο στη λίστα Top 25

Hottest Articles, Computer Science > Computer Standards & Interfaces, April to June 2014, <http://top25.sciencedirect.com/>

Kalloniatis, C., **Kavakli, E.** and Gritzalis, S. (2013) Addressing Privacy in Traditional and Cloud-Based Systems, *International Journal of Applied Industrial Engineering*, Vol 2, No 1, pp. 14 – 40.

Cossiavelou, V., Bantimaroudis, P., **Kavakli, E.**, Illia, L. (2011) The Media Gatekeeping Model Updated by R and I in ICTs: The Case of Wireless Communications in Media Coverage of the Olympic Games. *International Journal of Interdisciplinary Telecommunications and Networking (IJITN)*, Vol 3, No 4, pp. 49-74.

Kosta, E., Kalloniatis, C., Mitrou, L. and **Kavakli, E.** (2011) The “Panopticon” of Search Engines: The Response of the European Data Protection Framework, *Requirements Engineering Journal*, Vol 16, No 1, pp. 47-54.

Kalloniatis, C., **Kavakli, E.** and Kontelis, E. (2010) PriS-Tool: A Case Tool for Privacy-Oriented Requirements Engineering, *Journal of Information System Security (JISsec)*, Vol 6, No 1, pp. 3-19.

Kalloniatis, C., **Kavakli, E.**, Gritzalis, S. (2008) Addressing privacy requirements in system design: The PriS method, *Requirements Eng. (2008)* Vol 13, No 3, pp. 241-255.

Karkou, V., Bakogianni, S., **Kavakli, E.** (2008) Traditional Dance, Pedagogy and Technology: An overview of the WebDANCE project, *Research in Dance Education (CRID)*, Vol. 9, No. 2. (June 2008), pp. 163-186.

Kavakli, E., Gritzalis, S., Kalloniatis, C. (2007) Protecting Privacy in System Design: The Electronic Voting Case, *Transforming Government People Process and Policy*, Vol 1, No 4, pp.307-332.

Kavakli, E., Kalloniatis, C. Loucopoulos, P. and Gritzalis, S. (2006) Incorporating Privacy Requirements into the System Design Process: The PriS Conceptual Framework, *Internet Research*, Vol 16, No 2, pp. 140-158.

Kavakli, E. and Loucopoulos, P. (2006) Experiences with Goal-Oriented Modelling of Organisational Change, *IEEE Transactions on Systems, Man and Cybernetics - Part C*, Vol. 36, Issue 2, pp. 221-235.

Kavakli V. (2002) Goal Oriented Requirements Engineering: A Unifying Framework, *Requirements Engineering Journal*, Springer-Verlag London, Vol 6, No4, pp. 237-251.

Kavakli, V. and Loucopoulos, P. (1999) Goal-Driven Business Process Analysis – Application in Electricity Deregulation, *Information Systems*, Vol 24, No3, pp. 187-207.

**International
Conferences**

Kavakli, E., Sakellariou, R. and Stankovski, V. (2019) Towards a Methodology for Evaluating Big Data Platforms, *Proceedings of the IEEE World Congress on Services (SERVICES)*, Milan, Italy, 2019, pp. 380-381.

Loucopoulos P., **Kavakli E.**, Chechina N. (2019) Requirements Engineering for Cyber Physical Production Systems. In: Giorgini P., Weber B. (eds) *Advanced Information Systems Engineering. CAiSE 2019*. Lecture Notes in Computer Science, vol 11483. Springer, Cham, pp. 276-291.

Hamdi M.S., Ghannem A., Loucopoulos P., **Kavakli E.**, Ammar H. (2019) Intelligent Parking Management by Means of Capability Oriented Requirements Engineering. In: Wotawa F., Friedrich G., Pill I., Koitz-Hristov R., Ali M. (eds) *Advances and Trends in Artificial Intelligence. From Theory to Practice. IEA/AIE 2019*. Lecture Notes in Computer Science, vol 11606. Springer, Cham, pp. 158-172.

Kavakli, E., Buenabad-Chavez, J., Tountopoulos, V., Loucopoulos P. and Sakellariou, R. (2018) Specification of a Software Architecture for an Industry 4.0 Environment, *2018 Sixth International Conference on Enterprise Systems (ES)*, Limassol, 2018, pp. 36-43.

Tountopoulos, V., **Kavakli, E.** and Sakellariou, R. (2018) Towards a Cloud-Based Controller for Data-Driven Service Orchestration in Smart Manufacturing, *Proceedings of the Sixth International Conference on Enterprise Systems (ES)*, Limassol, 2018, pp. 96-99.

Sakellariou, R., Buenabad-Chávez, J., **Kavakli, E.**, Spais, I. and Tountopoulos, V. (2018) High performance computing and industry 4.0: experiences from the DISRUPT project. *Proceedings of the 18th International Conference on Embedded Computer Systems: Architectures, Modeling, and Simulation (SAMOS '18)*, ACM, New York, NY, USA, pp. 218–219.

Kavakli, E., Buenabad-Chávez, J., Tountopoulos, V., Loucopoulos, P. and Sakellariou, R. (2018) WiP: An Architecture for Disruption Management in Smart Manufacturing, *IEEE International Conference on Smart Computing (SMARTCOMP)*, Taormina, 2018, pp. 279-281.

Loucopoulos, P., **Kavakli, E.**, Anagnostopoulos, D. and Dimitrakopoulos, G. (2018) Capability-oriented Analysis and Design for Collaborative Systems: An example from the Doha 2022 World Cup Games. In *Proceedings of the 2018 10th International Conference on Computer and Automation Engineering (ICCAE 2018)*. ACM, New York, NY, USA, pp. 185–189.

Moraitou E., **Kavakli E.** (2018) Knowledge Management Using Ontology on the Domain of Artworks Conservation. In: *Ioannides M. (eds) Digital Cultural Heritage. Lecture Notes in Computer Science*, vol 10605. Springer, Cham, pp. 50-62.

Loucopoulos, P. and **Kavakli, E.** (2016) Capability Modeling with Application on Large-scale Sports Events, *22nd Americas Conference on Information Systems (AMCIS 2016)*, 11-14 August, 2016, San Diego, CA, USA,

Gongolidis, E., **Kavakli, E.**, Loucopoulos, P. and Kalloniatis C. (2016) Migrating eGovernment Services in the Cloud: A Capability Modelling Approach. In *Proceedings of the 20th Pan-Hellenic Conference on Informatics (PCI '16)*. ACM, New York, NY, USA, Article 24, pp. 1–6.

Simou, S., Kalloniatis, C., **Kavakli, E.**, Gritzalis, S. (2014) Cloud Forensics: Identifying the Major Issues and Challenges. *Proceedings of the CAiSE 2014*,

Jarke et. al (eds), Lecture Notes in Computer Science, Volume 8484, pp. 271-284.

Simou, S. Kalloniatis, C., **Kavakli, E.**, Gritzalis, S. (2014) Cloud Forensics Solutions: A Review. *Proceedings of the CAiSE Workshops 2014*, Iliadis, L., Papazoglou, M. and Pohl, K. (eds.), Lecture Notes in Business Information Processing, Volume 178, pp. 299-309.

Gongolidis, E., Kalloniatis, C., **Kavakli, E.** (2014) Requirements Identification for Migrating eGovernment Applications to the Cloud. *Proceedings of the 2nd IFIP TC5/8 International Conference - ICT-EurAsia 2014*, Lecture Notes in Computer Science, Volume 8407, pp 150-158.

Pavlidis, M., **Kavakli, E.**, Bantimaroudis, et al. (2013) The role of trust for the development and adoption of cultural internet-based systems, *Proceedings of the European, Mediterranean and Middle Eastern Conference on Information Systems (EMCIS 2013)*, 17-18 October 2013, Windsor, UK (*Best Paper Award*).

Chatzidimitris, T., **Kavakli, E.**, Economou, M. and Gavalas, D. (2013) Mobile AR Edutainment Applications for Cultural Institutions, *Proceedings of the 4th International Conference on Information, Intelligence, Systems and Applications (IISA '2013)*, 10 – 12 July, 2013, Piraeus, Greece, IEEE Conference Publications, pp. 1-4 .

Manousakis, V., Kalloniatis, C., **Kavakli, E.**, Gritzalis, S. (2013) Privacy in the Cloud: Bridging the Gap between Design and Implementation, *Proceedings of the WISSE 2013 3rd International Workshop on Information Systems Security Engineering, in conjunction with CAiSE 2013*, X. Franch and P. Soffer (Eds.), Lecture Notes in Business Information Processing, Volume 148, pp. 455-465.

Kalloniatis, C., Belsis, P., **Kavakli, E.**, Gritzalis, S. (2012) Applying soft computing technologies for implementing privacy-aware systems, *Proceedings of the Second International Workshop on Information Systems Security Engineering (WISSE '2012)*, M. Bajec and J. Eder (Eds.), Lecture Notes in Business Information Processing, Volume 112, pp. 31-45.

Tsadima A, Vassilopoulou K, **Kavakli E**, Sofianopoulou C. (2012) Integrating Media Richness Theory and Learning Styles: A Proposed Theoretical Framework. In *Proceedings of 4th International Conference on Education and New Learning Technologies (EDULEARN2012)*, 2-4 July, 2012, Barcelona, Spain. pp. 17-26.

Cossiavelou, V., Bantimaroudis, P., **Kavakli, E.**, Illia, L. (2011) Wireless communications in Olympic Games: R&I into the frame of the updated gate-keeping model. In *Proceedings of the 10th Wireless Telecommunications Symposium (WTS 2011)*, 13-15 April 2011, New York City, NY, Qing-An Zeng (ed), IEEE pp. 1-5.