

PERSONAL INFORMATION

Konstantinos Rantos



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Sex Male | Date of birth 21/03/1973 | Nationality Hellenic

POSITION

Associate Professor
Department of Computer Science
School of Sciences
International Hellenic University, Greece

WORK EXPERIENCE

05/2019 -	<p>Associate Professor, Department of Computer Science, International Hellenic University (2019-)</p> <p>International Hellenic University, Kavala, Greece</p> <p>Main research area: Information Systems and Communications Security</p> <p>Academia</p>
07/2010 – 05/2019	<p>Associate Professor, Department of Computer and Informatics Engineering - Head of Department (2015 – 2017)</p> <p>Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece, www.teiemt.gr</p> <p>Main research area: Information Systems and Communications Security</p> <p>Teaching: Computer networks, Information Systems and Computer Networks Security</p> <p>Academia</p>
04/2007 – 04/2010	<p>Information Security Scientific Officer</p> <p>Hellenic Ministry of Interior and e-Government, Athens Greece</p> <p>Scientific expert on e-identification, digital signatures and e-procedures security. Contribution to several e-government projects including the design, deployment, and management of a PKI for the Hellenic Public Administration and mechanisms for the protection of e-government services across EU. National representation to EU technical groups.</p> <p>Government</p>
06/2006 – 02/2007	<p>IT Security Consultant</p> <p>Encode Middle East FZ-LLC, Dubai, UAE</p> <p>Responsible and contributor to IT security related projects including PKI infrastructure design, security awareness programs, secure coding practices and web applications security.</p>

	Industry
09/2004 – 06/2006	Assistant Professor
	Technological Educational Institute of Kavala, Greece
	Responsible for teaching the courses: Computer Networks, Network Security, Cryptography, and Information Systems Security at the Industrial Informatics, and Information Management Departments of the Technological Educational Institute of Kavala.
	Academia
05/2003 – 08/2003	IT Security Consultant
	Encode S.A., Athens, Greece, www.encodegroup.com/
	Responsible for the design, implementation, and documentation of a public key infrastructure compliant with ETSI TS 102 042 for an Internet Banking application of a leading Greek Bank. Contribution to IT security related projects including secure coding practices and web applications security
	Industry
01/2001 – 05/2003	Software Engineer
	Datacard Group, London, UK, www.datacard.com
	Contribution to the design, implementation, testing, and debugging of certain areas of the Aptura project, a smart card operating system compliant with Java Card 2.1.1 and GlobalPlatform 2.0.1' specifications (also compliant with ISO/IEC7816 and EMV Level 1). Primary responsibilities also involved the design of the security architecture for a CALC (Proton World) compliant card, specification of crypto test cases for the Aptura project, as well as contributions to evolving standards. Participation in Datacard's proposal for an asymmetric authentication and key establishment protocol to be used by GlobalPlatform compliant cards. Contribution to the preparation of the Aptura project for Common Criteria evaluation. Investigation of certificate revocation techniques to be used by smart cards. Responsible for the implementation of Mastercard's Mchip v4.0.
	Industry
09/1997 – 01/2001	Research Assistant
	Royal Holloway, University of London, Egham, Surrey, UK
	Contribution to ACTS project ASPeCT, an international collaborative project on security of third generation mobile communications. Among the objectives of ASPeCT were the migration of security features from existing mobile systems to UMTS and the investigation of the role of Trusted Third Parties (TTPs) for end-to-end security services in UMTS. Contributions included the design of the authentication and initialisation of payment protocol (between a user and a value-added service provider), the design of the TTP infrastructure, and the implementation of the system for demonstration purposes. Responsible for the project "Minimum interoperability specification for key escrow mechanisms" funded by the European Commission (TMR programme) aiming to define a minimum set of requirements for key recovery mechanisms to enable interoperability between dissimilar schemes
	Academia

EDUCATION AND TRAINING

09/1997-02/2001

PhD in Information Security

EQF level 8

Royal Holloway, University of London, Egham, Surrey, UK

Thesis: "Key Recovery in a Business Environment".

The work was funded by the European Commission: **Marie Curie Research and Training Grant**.

09/1996-09/1997 **MSc in Information Security** EQF level 7
Royal Holloway, University of London, Egham, Surrey, UK

09/1990-07/1996 **Diploma (5 years univ; studies cycle) in Computer Engineering and Informatics** EQF level 7
Department of Computer Engineering and Informatics, University of Patras, Greece

PERSONAL SKILLS

Mother tongue(s) Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
State Certificate of Language Proficiency.					

Communication skills Excellent communication skills gained through my experience in the industry, public sector, administrative positions and as a professor in academia.

Organisational / managerial skills

- Member of Eastern Macedonia and Thrace Institute of Technology Board (2015-2017).
- Head of Department of Computer and Informatics Engineering, Eastern Macedonia and Thrace Institute of Technology (2015 – 2017).
- Deputy Head of Department of Computer and Informatics Engineering, Eastern Macedonia and Thrace Institute of Technology (2013 – 2015).
- Chair and Deputy Chair of Evaluation Committees.

Driving licence EU Clean Category B

ADDITIONAL INFORMATION

R&D Projects and Consulting

- **“Technical guideline on security measures for providers of wallets with Blockchain”, ENISA, 2022, Senior Consultant.**
The aim of the project is to create a list security measures with regards to the digital wallet providers that use blockchain technology and blockchain-related wallet functions.
- **“Support for the ENISA AHWG on Cybersecurity Skills Framework”, ENISA, 2021, Senior Consultant.**
The aim of the project is to review the work carried out by the ENISA's AHWG on Cybersecurity Skills Framework and propose improvement to the defined profiles.

- **Support for skills development, trainings and exercises (Design & planning of ENISA Cyber Exercises/Capacity building activities, Development and Delivery of a Course on Cyber Threat Management, Development of e-learning modules in the area of cryptography), ENISA, 2021, Senior Consultant.**

- **“Interoperable EU Risk Management Framework”, ENISA, 2021. Senior Consultant.**

The aim of the project is to facilitate the uptake of coordinated and interoperable RM frameworks by proposing an EU wide Interoperable Risk Management Framework with consistent methodology and risk assessment practices among Member States

- **“ELECTRON - rEsilient and seLf-healed EleCTRical pOwer Nanogrid”, Horizon 2020, Framework Programme , 2021. Senior Research Fellow**

The aim of the project is to address the need to shield against a variety of threats – from cybersecurity incidents and privacy violations to electricity disturbances and severe human errors caused by a lack of relevant training.

- **“The new Greek eGovernment Interoperability Framework”. Funded by the Greek Ministry of Digital Governance, 2021. Scientific Coordinator.**

The project aims to develop the new Greek Interoperability Framework for Greek e-government services, aligned with the European Interoperability Framework.

- **“INCIDENCE (promotINg Cyber-hyglene in eDucation through sECuring distaNCe lEarning), ERASMUS+, 2021, Senior Research Fellow.**

The aim of the project is to deliver a novel cyber hygiene framework, tailored to the requirements and characteristics of HEI distance learning and teaching and to offer a safe to use eLearning toolkit reflecting on modern eLearning pedagogies and state of the art cybersecurity and privacy advances.

- **“SmartROOT – Smart faRming innOvatiOn Training”, ERASMUS+, 2021, Senior Research Fellow.**

The project aims to prepare a new Joint Master Degree program in the field of Mixed Farming Systems (MFS)

- **“JAUNTY – Joint undergrAduate coUrses for smart eNErgy managemenT sYstems”, ERASMUS+, 2021, Senior Research Fellow.**

The project aims to enhance undergraduate students’ knowledge and skills on Smart Energy Management Systems (SEMS), in order to address urgent technological challenges and needs of high-qualified personnel in the ICT and energy sector.

- **“Development of an innovative scenario for risk management training and use of ICT security controls in a fictional public administration”, ENISA, 2020. Scientific Coordinator.**

The project aims to design and implement a scenario to be used as a tabletop exercise in a risk management training course.

- **“Conduct a gap analysis and recommend areas of improvement for a manuscript in the field of machine learning for incident detection and response”, ENISA, 2020. Scientific Coordinator.**

- **“State of Vulnerabilities 2018/2019 - Analysis of Events in the life of Vulnerabilities”, ENISA, 2019. Report: <https://www.enisa.europa.eu/publications/technical-reports-on-cybersecurity-situation-the-state-of-cyber-security-vulnerabilities>. Senior Research Fellow.**

The project aims to provide an insight on both the opportunities and limitations the vulnerability ecosystem offers and to answer questions related to the reliability, accuracy of the vulnerability sources and the widely accepted evaluation metrics.

- **“Design, development and delivery of a training programme in Information**

Security Management for MS and EU bodies”, ENISA, 2019. Senior Consultant .

- **“CS-AWARE - A cybersecurity situational awareness and information sharing solution for local public administrations based on advanced big data analysis”, Horizon 2020 Framework Programme , 2018. Senior Research Fellow.**

The project aims to propose a cybersecurity situational awareness solution for local public administrations that, based on an analysis of the context, provides automatic incident detection and visualization, and enables information exchange with relevant national and EU level NIS authorities like CERTs.

- **“SlideWiki”, Horizon 2020 Framework Programme, 2018). Member of the Advisory Board.**

The SlideWiki project, provides an open-source online platform for collaboratively creating and sharing Open Educational Resources in the form of presentation slides.

- **“DANTE – Detecting and ANalysing TErrorist-related online contents and financing activities” (Horizon 2020 Framework Programme, 2016-2019). Member of the Advisory Board.**

The project aims to deliver effective, efficient, automated data mining and analytics solutions and an integrated system to detect, retrieve, collect and analyse huge amount of heterogeneous and complex multimedia and multi-language terrorist-related contents, from both the Surface and the Deep Web, including Dark nets.

- **“Specification of a PKI” for the European Agency EU-LISA, 2016. Role: Security Architect.**

The project aimed at redesigning and specifying a public-key infrastructure providing certification services for the needs of entities authentication and for fortifying communications among Agency’s employees and devices of the EU-wide networks of VISA Information System, Schengen Information System, EURODAC and Dublinet. Main responsibilities included identification and analysis of requirements and the design and proposal a PKI solution that satisfies the identified requirements.

- **“Mobile Applications Development Training Courses”, Eastern Macedonia and Thrace Institute of Technology, 2015. Role: Responsible for the “Mobile computing security” module.**

The aim of the project was to develop educational material and to carry out training seminars on issues related to the development of mobile phone applications.

- **“ADVISE – Advanced Video Surveillance archives search engine for security applications”, FP7 Security Research Project, 2014. Member of the Advisory Board.**

The project aimed at designing and developing a unification framework for surveillance-footage archive systems. Main responsibilities included to advise the project on its progress and provide expert’s advice on security related issues.

- **“PIN Processing Options” for the UK Cards Association. Role: System Security Specialist, 2014.**

The project aimed at researching on the potential benefits of UK payment cards migration to online PIN verification and assessing the impact of online PIN enabled cards used in an unchanged UK POS infrastructure. Main responsibilities included:

- Analyse the requirements and views of UK financial institutions affected by online PIN verification.
- Perform a fraud analysis and contribute to the threat analysis and recommendations with regards to migrating to online PIN verification.

- **“Open courses” for the Eastern Macedonia and Thrace Institute of Technology, 2014. Role: Technical Manager**

The project aimed at developing the infrastructure and creating educational material openly available from specific portal.

- **“nshield: new embedded Systems architecture for multi-Layer Dependable solutions”, ARTEMIS Joint undertaking, 2011-2015. Role: Senior Research Fellow**

The nSHIELD project aimed at being a pioneer investigation to address Security, Privacy and Dependability (SPD) in the context of Embedded Systems (ESs) as “built in” rather than as “add-on” functionalities, proposing and perceiving with this strategy the first step toward SPD certification for future ES. Main contributions included:

- Identifying and structuring the requirements of the nShield architecture
- Securing the communication links over low power and lossy networks
- Addressing identification and authentication issues to control access to nodes resources.

- **“Hellenic Public Administration’s Certification Services”, Hellenic Ministry of Interior, Decentralization and eGovernment, 2007-2010. Role: Information Security Advisor**

The project aimed at designing and implementing a PKI that will serve as the national infrastructure providing certification services to citizens, legal entities and public servants. The Hellenic Public Administration Root CA is one of the five Certification Service Providers issuing qualified certificates in Greece. Leader of the working group responsible for:

- Identifying certification services requirements
- Designing certification services and architecture
- Certification services deployment
- Services documentation including Certification Policies for the Greek Public Administration.

- **“Design and development of the National e-Government Portal of Public Administration for Citizens and Enterprises Information and Secure Electronic Transactions - www.ermis.gov.gr”, Hellenic Ministry of Interior, Decentralization and eGovernment, 2007-2010. Role: Information Security Advisor – Working Group Leader for Digital Authentication – PKI)**

The project aimed at designing and deploying public administration electronic services provided to citizens and legal entities. Main responsibilities included designing and managing the implementation of services related to:

- e-identification, digital signatures, and related procedures
- Identity management (including co-operation with other identity providers for single sign-on purposes)

- **“Greek eGovernment Interoperability Framework”, <http://www.e-gif.gov.gr>, 2009. Role: Working Group Leader, Responsible for e-id and PKI related issues**

The Greek e-Government Interoperability Framework aimed to provide a solution at Central, Regional and Local level, to the interoperability issue regarding the provision of e-Government services to public bodies, businesses and citizens. Main responsibility included:

- The Digital Authentication Framework, which sets the standards, procedures

and technologies required for the registration, identification and authentication of the users

- **“STORK 2.0 - Secure idenTity acrOss boRders linKed 2.0”, Large scale pilot project, 2010. Role: Deputy Manager**

STORK 2.0 contributed to the realization of a single European electronic identification and authentication area by establishing interoperability of different approaches at national and EU level, eID for persons and legal entities.

- **“SPOCS - Simple Procedures Online for Cross-border Services”, Large scale pilot project, 2009-2010. Role: WP Leader.**

SPOCS was a large-scale pilot project aiming to build the next generation of online portals (Point of Single Contact or PSC), which every European country had in place, through the availability of high impact cross-border electronic procedures. Main contributions included:

- Investigating e-identification and authentication interoperability issues for the Greek National Portal Ermis
- Specifying required changes for the portal to assist adoption of the SPOCS solution.

- **“PKI for the Hellenic Bank Association”, 2008. Role: Security architect**

The project aimed at designing a PKI solution for the Hellenic Bank Association aiming to provide certification services to citizens (qualified certificates) and legal entities. Main responsibilities included:

- Requirements identification
- Design of the proposed solution
- Preparation of certification policies

- **“Preparation and development of eGovernment Services and Information Security related training material for the Hellenic National Centre for Public Administration & Local Government”, 2008.**

The material was adopted by the Hellenic National Centre for Public Administration & Local Government for an extensive program of training public servants on issues related to security awareness, certification services, and digital signatures.

- **“Design of a PKI for a security IT infrastructure”, Arab Bank, 2006. Role: Security Architect**

The project aimed at designing and a PKI solution providing certification services to employees and customers geographically dispersed in Middle East and Europe. Main responsibilities included:

- Requirements identification
- Design of the proposed solution
- Preparation of certification policies

- **“Design and delivery of a security awareness program”, Saudi Aramco, 2007. Role: Security Architect**

The aim of the project was to design, develop, and evaluate an information security awareness program in accordance with the organization's security policy.

- **“Delivering a security awareness program”, Saudi Telecomms, 2006.**

The aim of the project was to analyse the requirements related to the design, development, and evaluation of an information security awareness program in accordance with the organization's security policy.

- **“Best Practices for Key Management on Smart Cards”, for Codes&Ciphers, UK, 2006.**

The aim of the project was to study and define specifications for managing symmetric encryption keys on smart cards.

- **“PKI Design & Implementation”, for Eurobank-Greece, 2003.**

The project aimed at designing and implementing an internal PKI solution for the needs of users' authentication and exchange of authenticated and encrypted documents. Main responsibilities included:

- Requirements identification
- Design and implementation of the proposed solution
- Providing all the necessary documentation

- **“ASPeCT: Advanced Security for Personal Communications Technologies”, EU ACTS project, 1998. Role: Research assistant**

This research project addressed security issues in third generation mobile communications.

Publications

- S. Tsimenidis, T. Lagkas, and K. Rantos, “Deep Learning in IoT Intrusion Detection,” *Journal of Network and Systems Management*, vol. 30, no. 1, pp. 1–40, 2022.
- F. Di Franco, K. Papadatos, and K. Rantos, “Re-Visiting Cyber Security Training in the COVID-19 Era,” *IJISC*, vol. 10, no. 2, pp. 16–20, Dec. 2021, doi: 10.19107/IJISC.2021.02.02.
- I. Lykidis, G. Drosatos, and K. Rantos, “The Use of Blockchain Technology in e-Government Services,” *Computers*, vol. 10, no. 12, p. 168, 2021.
- D. Chatziamanetoglou, K. Rantos. CTI Blockchain-Based Sharing using Proof-of-Quality Consensus Algorithm, In 2021 IEEE CSR Workshop on Actionable Cyber Threat Intelligence (ACTI), 2021, pp. 331–336.
- K. Kaltakis, P. Polyzi, G. Drosatos, and K. Rantos, “Privacy-Preserving Solutions in Blockchain-Enabled Internet of Vehicles,” *Applied Sciences*, vol. 11, no. 21, p. 9792, 2021.
- N. Zapoglou, I. Patsakos, G. Drosatos, K. Rantos. (2021) Privacy-Preserving Blockchain-Based Solutions in the Internet of Things. In: Paiva S., Lopes S.I., Zitouni R., Gupta N., Lopes S.F., Yonezawa T. (eds) *Science and Technologies for Smart Cities. SmartCity360° 2020*. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 372. Springer, Cham
- A. Triantafyllou, J. A. P. Jimenez, A. d. R. Torres, T. Lagkas, K. Rantos and P. Sarigiannidis, "The Challenges of Privacy and Access Control as Key Perspectives for the Future Electric Smart Grid," in *IEEE Open Journal of the Communications Society*, doi: 10.1109/OJCOMS.2020.3037517.
- G. Drosatos, K. Rantos, D. Karampatzakis, T. Lagkas and P. Sarigiannidis, "Privacy-preserving solutions in the Industrial Internet of Things," 2020 16th International

- Conference on Distributed Computing in Sensor Systems (DCOSS), Marina del Rey, CA, USA, 2020, pp. 219-226, doi: 10.1109/DCOSS49796.2020.00044.
- A. Spyros, K. Rantos, A. Papanikolaou, and C. Ilioudis. An Innovative Self-Healing Approach with STIX Data Utilisation: In: Proceedings of the 17th International Joint Conference on E-Business and Telecommunications. SCITEPRESS - Science and Technology Publications; 2020:645-651. doi:10.5220/0009893306450651
 - K. Demertzis, K. Rantos, and G. Drosatos, "A Dynamic Intelligent Policies Analysis Mechanism for Personal Data Processing in the IoT Ecosystem," *BDCC*, vol. 4, no. 2, p. 9, Apr. 2020, doi: 10.3390/bdcc4020009.
 - K. Rantos, A. Spyros, A. Papanikolaou, A. Kritsas, C. Ilioudis, and V. Katos, "Interoperability Challenges in the Cybersecurity Information Sharing Ecosystem," *Computers*, vol. 9, no. 1, p. 18, Mar. 2020, doi: 10.3390/computers9010018.
 - K. Rantos, G. Drosatos, A. Kritsas, C. Ilioudis, A. Papanikolaou, and A. Filippidis, "A Blockchain-based Platform for Consent Management of Personal Data Processing in the IoT ecosystem," *Security and Communication Networks*, vol. 2019, Article ID 1431578, Wiley & Hindawi, 2019.
 - A. Papastilianou, A. Stasis, K. Rantos, and V. Kalogirou, "Blended Learning and Open Courseware for Promoting Interoperability in Public Services," in *E-Democracy – Safeguarding Democracy and Human Rights in the Digital Age*, Cham, 2020, pp. 79–93.
 - T. Schaberreiter, V. Kupfersberger, K. Rantos, A. Spyros, A. Papanikolaou, Ch. Ilioudis, and G. Quirchmayr. A Quantitative Evaluation of Trust in the Quality of Cyber Threat Intelligence Sources. In Proceedings of the 14th International Conference on Availability, Reliability and Security (ARES '19). ACM, Article 83, 10 pages. DOI: <https://doi.org/10.1145/3339252.3342112>.
 - K. Rantos, G. Drosatos, K. Demertzis, C. Ilioudis, A. Papanikolaou, and A. Kritsas, "ADvoCATE: A Consent Management Platform for Personal Data Processing in the IoT Using Blockchain Technology," in *Innovative Security Solutions for Information Technology and Communications*, vol. 11359, J.-L. Lanet and C. Toma, Eds. Cham: Springer International Publishing, 2019, pp. 300–313.
 - T. Schaberreiter, J. Roning, G. Quirchmayr, V. Kupfersberger, C. Wills, M. Bregonzio, A. Koumpis, J. E. Sales, L. Vasiliu, K. Gammelgaard, A. Papanikolaou, K. Rantos and A. Spyros. A Cybersecurity Situational Awareness and Information-Sharing Solution for Local Public Administrations based on Advanced Big Data Analysis: The CS-AWARE Project. In J.B. Bernabe, A. Skarmeta (Eds), *Challenges in Cybersecurity and Privacy – the European Research Landscape*, River Publishers, 2019.
 - K. Tsiknas, K. Rantos, C. J. Schinas, and A. Soilemes, "Performance evaluation of TCP-BIAD in high-speed, long-distance networks," *Computing*, vol. 101, no. 4, pp. 319–337, 2019.
 - K. Rantos, G. Drosatos, K. Demertzis, C. Ilioudis, and A. Papanikolaou, "Blockchain-based Consents Management for Personal Data Processing in the IoT Ecosystem," in Proceedings of the 15th International Joint Conference on e-Business and Telecommunications, Porto, Portugal, 2018, pp. 738–743.
 - K. Rantos, K. Fysarakis, C. Manifavas, and I. G. Askoxylakis, "Policy-Controlled Authenticated Access to LLN-Connected Healthcare Resources," *IEEE Systems Journal*, vol. 12, no. 1, pp. 92–102, Mar. 2018.
 - P. Azzoni, K. Rantos, L. Geretti, A. Abramo, and S. Gosetti, Biometric Security Domain, In A. Fiaschetti, J. Noll, P. Azzoni, and R. Uribeetxeberria (eds), *Measurable and Composable Security, Privacy, and Dependability for Cyberphysical Systems, The SHIELD Methodology*, CRC Press, pp. 283-336, 2017
 - P. Azzoni, L. Geretti, A. Abramo, K. Stefanidis, J. Gialelis, A. Papalambrou, D. Serpanos, K. Rantos, A. Toma, N. Tassadaq, K. Dabcevic, C. Regazzoni, L. Marcenaro,

- M. Traversone, M. Cesena, and S. Mignanti. Security, Privacy, and Dependability Technologies. In A. Fiaschetti, J. Noll, P. Azzoni, and R. Uribeetxeberria (eds), Measurable and Composable Security, Privacy, and Dependability for Cyberphysical Systems, The SHIELD Methodology, CRC Press, pp. 29-104, 2017
- D. Jayasinghe, R. Naeem Akram, K. Markantonakis, K. Rantos, and K. Mayes, “Enhancing EMV Online PIN Verification”, The 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom-15): International Symposium on Recent Advances of Trust, Security and Privacy in Computing and Communications (IEEE RATSP-15). Helsinki, Finland IEEE CS, August 2015
 - K. Rantos, K. Fysarakis, O. Soultatos and I. Askoxylakis, Secure and Authenticated Access to LLN Resources through Policy Constraints. In proceedings of: 9th WISTP International Conference on Information Security Theory & Practice (WISTP 2015), Heraklion, Crete, Greece, August 2015.
 - K. Fysarakis, Ch. Konstantourakis, K. Rantos, Ch. Manifavas and I. Papaefstathiou, WSACd - A Usable Access Control Framework for Smart Home Devices. In proceedings of: 9th WISTP International Conference on Information Security Theory & Practice (WISTP 2015), Heraklion, Crete, Greece, August 2015.
 - K. Fysarakis, K. Rantos, Oth. Sultatos, Ch. Manifavas, I. Papaefstathiou. Policy-based Access Control for DPWS-enabled Ubiquitous Devices. In proceedings of: 19th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA 2014), Barcelona, Spain, September 2014.
 - A. Papanikolaou, K. Rantos and I. Androulidakis. Proxied IBE-based Key Establishment for LLNs. In Proceedings of: The 10Th International Conference on Digital Technologies 2014, Zilina, Slovak Republic, July 2014.
 - Ch. Manifavas, K. Fysarakis, K. Rantos, K. Kagiambakis, I. Papaefstathiou. Policy-based Access Control for Body Sensor Networks. In proceedings of: 8th Workshop in Information Security Theory & Practice (WISTP 2014), Heraklion, Crete, Greece, June 2014.
 - Ch. Manifavas, K. Fysarakis, K. Rantos, G. Hatzivasilis. DSAPE – Dynamic Security Awareness Program Evaluation. Human Aspects of Information Security, Privacy and Trust (HCI International 2014), Heraklion, Crete, Greece, 2014.
 - K. Fysarakis, G. Hatzivasilis, K. Rantos, A. Papanikolaou, and C. Manifavas. Embedded Systems Security Challenges. In Proceedings of “Measurable security for Embedded Computing and Communication Systems (MeSeCCS 2014)”, within the International Conference on Pervasive and Embedded Computing and Communication Systems (PECCS 2014), Lisbon, Portugal, 2014.
 - Ch. Manifavas, G. Hatzivasilis, K. Fysarakis, K., and K. Rantos. Lightweight cryptography for embedded systems – A comparative analysis. In 6th International Workshop on Autonomous and Spontaneous Security (SETOP 2013), Egham, U.K, Springer-Verlag LNCS (8247), pp. 371–382.
 - K. Rantos, Y. Katsikogiannis, A. Papadakis and A. Stasis. “Secure e-government services across EU”, *Int. J. Electronic Governance* 6 (2), 117-132, 2013.
 - K. Rantos and K. Markantonakis. “Analysis of Potential Vulnerabilities in Payment Terminals”. In K. Markantonakis and K. Mayes (eds): *Secure Smart Embedded Devices, Platforms and Applications*, Springer New York, pp. 311-333.
 - K. Rantos, A. Papanikolaou, C. Manifavas, and I. Papaefstathiou. IPv6 security for low power and lossy networks. In *Wireless Days 2013 (WD 2013)*, IFIP, vol., no., pp.1,8, 13-15 Nov. 2013, Valencia, Spain.
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2013, pp. 59–64.

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- K. Rantos, A. Papanikolaou, K. Fysarakis and Ch. Manifavas. Secure Policy-Based Management Solutions in Heterogeneous Embedded Systems Networks. *Proceedings of IEEE International Conference on Telecommunications & Multimedia, TEMU 2012, Heraklion, Crete, 2012.*
- K. Rantos. Digital Signatures: How close is Europe to truly interoperable solutions?, in B. De Decker, J. Lapon, V. Naessens, and A. Uhl (eds.): *Proceedings of the 12th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security - CMS 2011, Ghent, Belgium, 2011, Springer-Verlag (LNCS 7025)*, pp.155-162.
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- A. Papadakis, K. Rantos, A. Stasis. The Realization of the Greek E-GIF, Official Proceedings of the Second European Summit on Interoperability in the iGovernment, Rome 2008, www.esiig2.it.
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- K. Rantos and C.J. Mitchell. Matching key recovery mechanisms to business requirements. *Computers & Security (2005) 24 (3)*, 232-245.
- K. Rantos and K. Markantonakis. An asymmetric cryptography secure channel protocol for smart cards, in: Yves Deswarte, Frédéric Cuppens, Sushil Jajodia, Lingyu Wang (eds.): *Security and Protection in Information Processing Systems, IFIP 18th WorldComputer Congress, TC11 19th International Information Security Conference, August 2004, Toulouse, France. Kluwer 2004*, pp. 351–366.
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- K.Rantos and C.J.Mitchell. Key recovery for archived data using smart cards. In *Proceedings of the 5th Nordic Workshop on Secure IT Systems (NORDSEC 2000), Reykjavik, Iceland, October 2000.*
- C.J. Mitchell and K. Rantos. A fair certification protocol. *ACM Computer Communication Review*, 29 no. 3 (July 1999) 47-49.
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- C. Markantonakis and K. Rantos. On the life cycle of the certification authority key pair in EMV 96. In *Proceedings of Euromedia '99, Munich, Germany, April 1999.*
- K.Rantos and C.J. Mitchell. Key Recovery in ASPeCT Authentication and Initialisation of Payment Protocol. In *Proceedings of the 4th ACTS Mobile Communications Summit, Sorrento, Italy, June 1999.*
- B. Preneel, K.M. Martin, G. Horn, P. Howard, C.J. Mitchell, and K. Rantos. Trialling secure billing with Trusted Third Party support for UMTS applications. In *Proceedings*

of the Third ACTS Mobile Communications Summit, Rhodes, Greece, June 1998.

Additional Professional Activities

- Member of the ENISA Network and Information Security Experts Groups (07/2017 – to date)
- Director of the “Web Services and Information Security-WeSIS” Research Lab – International Hellenic University.
- Responsible for the CISCO Academy Branch at International Hellenic University – former Eastern Macedonia and Thrace Institute of Technology (2015 – to date).
- Chair of the Research Ethics Committee of the International Hellenic University (2021 – to date)
- Data Protection Officer at Eastern Macedonia and Thrace Institute of Technology (2018 – 2019)
- Teaching in the following MSc/MPhil Degrees Programmes:
 - «MSc in Cybersecurity», International Hellenic University (2019 – to date)
 - «MPhil in Advanced Technologies in Informatics and Computers», International Hellenic University (Course: Secure Systems and Applications, Applied Cryptography, Security and Privacy in Cyberphysical Systems) (2016-to date)
 - «MSc in Informatics», Ionian University (Specialisation: Computer technologies and information systems – Course: Information Systems and Network Security) (2016-2018)
 - «MSc in WEB Intelligence», Department of Information Technology, Alexander TEI of Thessaloniki (Course: Internet Security) (2016-2018)
- CyberNoesis Associate Advisor (2015 – to date).
- Representative of the Greek Government to EU technical groups for digital signatures, e-procedures and EU2020 Committee – E-government subgroup (2008 – 2010).
- Teaching in e-government services and digital signatures related training courses organized by the Hellenic National Centre for Public Administration & Local Government (2007 – to date).
- Participation in management, evaluation and implementation of EU co-funded IT related Greek projects:
 - Research – Development – Innovation, Special Management and Action Implementation Service of Research, Technological Development and Innovation (Evaluator – 2017)
 - Supporting researchers with an emphasis on young researchers, Special Management Service of Education and LifeLong Learning (Evaluator - 2017)
 - Digital Acropolis museum (Evaluation Committee Chairman – 2014),
 - G-cloud Datacenter Facilities (Evaluation Committee Deputy Chairman – 2014)
 - ICT infrastructures Assessment Laboratory (Evaluation Committee Member – 2008)
 - Design and development of the National e-Government Portal of Public Administration for Citizens and Enterprises Information and Secure Electronic Transactions - www.ermis.gov.gr (Digital Authentication and PKI Working Group

- Leader – 2010),
- Greek e-government interoperability framework (Digital Authentication Working Group Leader – 2007).
- International Scientific Journals' Editorial Board Member
 - International Journal of Security and Its Applications (IJSIA)
 - International Journal of Network Security and Its Applications (IJNSA)
- Editor (Special Issues):
 - K.Rantos, V.Katos G.Drosatos, K.Demertzis, K.Fysarakis. Advances in Cyber Threat Intelligence, Security and Communication Networks, Hindawi, 2021.
 - G.Drosatos, K.Rantos, K.Dermertzis. Advanced Technologies in Data and Information Security, MDPI, Applied Sciences, 2021.
 - P Sarigiannidis, T Lagkas, K Rantos, F. Ramos. Special Issue on 'Cybersecurity and Privacy-Preserving in Modern Smart Grid', 2020, MDPI Sensors
 - P Sarigiannidis, P Bellavista, T Lagkas, K Rantos, The Big Data Era in IoT-enabled Smart Farming: Re-defining Systems, Tools, and Techniques. - 2019 – Elsevier
- Scientific Journals Reviewer:
 - Computers & Security (Elsevier)
 - IEEE Software
 - IEEE Access
 - IEEE Transactions on Information Forensics and Security
 - Journal of Systems and Software (Elsevier)
 - Computer Networks (Elsevier)
 - Information Sciences (Elsevier)
 - Blockchain: Research and Applications (Elsevier)
 - Journal of Computer Science and Technology (Springer)
 - Security and Communication Networks (Wiley)
 - SpringerPlus
 - IET Information Security
 - Sensors (MDPI)
 - Computers (MDPI)
 - Applied Sciences (MDPI)
 - Journal of Biomedical Informatics
 - Applied Sciences (MDPI)
 - Sensors (MDPI)
 - Journal of King Saud University - Computer and Information Sciences (Elsevier)
 - Journal of Biomedical Informatics
 - Springer Nature – Applied Sciences
- Member of Conferences Program Committee:

- IoT4 2021, 3rd International Workshop on IoT Applications and Industry 4.0
- ACM BSCI 2021, The 3rd ACM International Symposium on Blockchain and Secure Critical Infrastructure.
- ATC 2021, The 18th IEEE International Conference on Advanced and Trusted Computing, October 2021, Atlanta, USA. Part of the 2021 IEEE Smart World Congress.
- 14th IADIS International Conference on Information Systems (IS 2021).
- CM BSCI 2021, The 3rd ACM International Symposium on Blockchain and Secure Critical Infrastructure, Hong Kong, China.
- iSCI 2020, The 8th IEEE International Conference on Smart City and Informatization
- IoT4 2020, 2nd International Workshop on IoT Applications and Industry 4.0
- STM 2020, The 16th International Workshop on Security and Trust Management
- ISIoT 2020, 2nd International Workshop on Intelligent Systems for the Internet of Things
- ATC 2020, The 17th IEEE International Conference on Advanced and Trusted Computing, Melbourne, Australia, 2020.
- IoT4 2019, International Workshop on IoT Applications and Industry 4.0, Santorini, Greece, 2019
- 26th International Conference on Telecommunications (ICT) (ICT 2019), Hanoi, Vietnam, 2019.
- The 16th IEEE International Conference on Advanced and Trusted Computing 2019, Leicester, UK
- 2019 IEEE Sensors Applications Symposium, Sophia Antipolis, France.
- 21st International Conference on Enterprise Information Systems (ICEIS 2019), Heraklion, Crete.
- ICoS 2019 International Conference on Computing for Society, Bahawalpur, Pakistan.
- The 15th IEEE International Conference on Advanced and Trusted Computing, Guangzhou, China, 2018.
- 2018 IEEE Sensors Applications Symposium, Seoul, Korea.
- 20th International Conference on Enterprise Information Systems (ICEIS 2018), Portugal, 2018.
- IEEE Globecom 2017. IEEE Workshop on Low Power Wide Area networking technologies for emerging Internet of Things (LPWA4IoT), Singapore.
- Cloud and Trusted Computing 2017 (C&TC 2017), International Symposium on Secure Virtual Infrastructures, Rhodes, Greece
- The 14th IEEE International Conference on Advanced and Trusted Computing, Toulouse, San Francisco Bay Area, 2017.
- Second International Conference on Internet of Things Data, and Cloud Computing, Cambridge, United Kingdom, 2017
- 24th International Conference on Telecommunications, Limassol, Cyprus, 2017.
- 2017 IEEE Sensors Applications Symposium, New Jersey, USA, 2017.
- The 13th IEEE International Conference on Advanced and Trusted Computing,

Toulouse, France, 2016.

- 23rd International Conference on Telecommunications, Thessaloniki, Greece, 2016
- 2016 IEEE Sensors Applications Symposium, Italy, 2016.
- 2015 IEEE Sensors Applications Symposium, Croatia, 2015.
- IADIS International Conference: Information Systems 2014, Spain 2014.
- 4th International Conference on Pervasive and Embedded Computing and Communication Systems, PECCS 2014, Portugal.
- IADIS International Conference: Information Systems 2013, Portugal 2013.
- Workshop in Information Security Theory and Practices 2010: Security and Privacy of Pervasive Systems and Smart Devices, Passau, Germany, 2010.
- Workshop in Information Security Theory and Practices 2009: Smart Devices, Pervasive Systems, Ubiquitous Networks, Brussels, Belgium, 2009.
- Workshop in Information Security Theory and Practices 2008: Smart Devices, Convergence and Next Generation Networks, Sevilla, Spain, 2008.
- Workshop in Information Security Theory and Practices 2007: Smart Cards, Mobile and Ubiquitous Computing Systems, Heraklion, Crete, May 2007.