

CURRICULUM VITAE

IOANNA KANTZAVELOU

B.Sc. in Computer Science
M.Sc. in Computer Security
Ph.D. in Computer Security

December 2022

1. PERSONAL DETAILS

Surname: **Kantzavelou**
Name: **Ioanna**
Father's name: Michael
Mother's name: Helen
Nationality: Greek
Place of birth: Athens
Work address: EGALEO PARK CAMPUS,
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Sex: Female
Marital status: Married with one child

2. EDUCATION

- Ph.D. in Computer Security, Dept. of Information and Communication Systems Engineering, School of Sciences, University of the Aegean, "Intrusion Detection in Information Technology Security", Karlovasi, Samos, Greece, July 2011.
- M.Sc. by research in Computer Security, Dept. of Computer Science, University College Dublin (UCD), National University of Ireland, "An Attack Detection System for Secure Computer Systems", Dublin, Ireland, July 1994.
- B.Sc. in Informatics Engineering. Dept. of Informatics, Technological Educational Institute (T.E.I.) of Athens, Athens, Greece, October 1991.

3. PROFESSIONAL EXPERIENCE

Current Position

- Assistant Professor, full-time tenure track faculty position, Dept. of Informatics and Computer Engineering, School of Engineering, University of West Attica, (Feb 2018 – present).
- Head of the [INS_{Sec}](#) Research Group (Information, Network, and System Security), Parallel and Distributed Systems and Networks Research Laboratory ([PDSN](#)), Dept. of Informatics and Computer Engineering, School of Engineering, University of West Attica, (2018 – present).

Previous Positions

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| Dec. 2014 - Feb. 2018 | Assistant Professor, full-time tenure track faculty position, Dept. of Informatics, School of Technological Applications, Technological Educational Institution (TEI) of Athens. |
| Feb. 2003 - Dec. 2014 | Lecturer, full-time tenure track faculty position, Dept. of Informatics, School of Technological Applications, Technological Educational Institution (TEI) of Athens. |
| Sep. 2000 - Aug. 2002 | Part-time Lecturer (Adjunct Staff with PD 407/80), Dept. of Information and Communication Systems Engineering, School of Sciences, University of the Aegean. |
| Sep. 1995 - Feb. 2003 | Part-time Lecturer (Adjunct Staff), Dept. of Informatics, School of Technological Applications, Technological Educational Institution (TEI) of Athens. |

4. TEACHING EXPERIENCE

Postgraduate Programs

- [4.20] Assistant Professor, individual teaching and course development: **Information and Communication Systems Security**, 2021-2022 (winter semester, 39 hours), Master's Program, Master's Diploma of Specialization: "**New Generation Communication Networks and Distributed Applications Environments**", Department of Informatics and Computer Engineering, University of West Attica (October 2021 - February 2022).
- [4.19] Assistant Professor, (0.5) teaching and course development: **Secure and Trusted Distributed Systems**, 2021-2022 (spring semester, 21 hours), Master's Program, Master's Diploma of Specialization: "**New Generation Communication Networks and Distributed Applications Environments**", Department of Informatics and Computer Engineering, University of West Attica (April 2021 - July 2022).
- [4.18] Assistant Professor, individual teaching and course development: **Information and Communication Systems Security**, 2018-2019 (winter semester, 39 hours), 2019-2020 (winter semester, 39 hours), 2020-2021 (winter semester, 39 hours), Master's Program, Master's Diploma of Specialization: "**Science and Technology of Informatics and Computers**", Department of Informatics and Computer Engineering, University of West Attica (October 2018 - February 2021).
- [4.17] Assistant Professor, (0.5) teaching and course development: **Network Security**, 2019-2020 (spring semester, 19.5 hours), 2020-2021 (spring semester, 19.5 hours), 2021-2022 (spring semester, 19.5 hours), Master's Program, Master's Diploma of Specialization: "**Cybersecurity**", Department of Informatics and Computer Engineering, University of West Attica (March 2020 - July 2022).
- [4.16] Assistant Professor, individual teaching and course development: **Information and Systems Security**, 2018-2019 (spring semester, 39 hours), Master's Program, Master's Diploma of Specialization: "**Informatics and Applications**", Department of Informatics and Computer Engineering, University of West Attica (March 2019 - July 2019).
- [4.15] Assistant Professor, (0.5) teaching and course development: **Information and Systems Security**, 2019-2020 (spring semester, 19.5 hours), 2020-2021 (spring semester, 19.5 hours), 2021-2022 (spring semester, 19.5 hours), Master's Program, Master's Diploma of Specialization: "**Informatics and Applications**", Department of Informatics and

Computer Engineering, University of West Attica (March 2020 - July 2022).

- [4.14] Assistant Professor, individual teaching and course development: **Information and Systems Security**, 2014-2015 (spring semester, 39 hours), 2015-2016 (spring semester, 39 hours), 2016-2017 (spring semester, 39 hours), 2017-2018 (spring semester, 39 hours), Master's Program, Master's Diploma of Specialization: “**Computing and Networks Technologies**”, Department of Informatics, School of Technological Applications, Technological Educational Institution (TEI) of Athens (March 2015 - July 2018).

Undergraduate Programs

- [4.13] Assistant Professor, individual teaching and course development: **Information Technology Security**, Department of Informatics and Computer Engineering, University of West Attica (September 2018 - today).
- [4.12] Assistant Professor, individual teaching and course development: **Game Theory**, Department of Informatics and Computer Engineering, University of West Attica (September 2018 - today).
- [4.11] Assistant Professor, individual teaching and course development: **Network and Communication Security**, Department of Informatics and Computer Engineering, University of West Attica (September 2018 - today).
- [4.10] Assistant Professor, individual teaching and course development: **Introduction to Computer Science**, Department of Informatics and Computer Engineering, University of West Attica (September 2018 - today).
- [4.9] Assistant Professor, individual teaching and course development: **Numerical Analysis and Applications**, Department of Informatics, Technological Educational Institute of Athens (December 2014 - September 2018).
- [4.8] Assistant Professor, individual teaching and course development: **Introduction to Informatics**, Department of Informatics, Technological Educational Institute of Athens (December 2014 - September 2018).
- [4.7] Assistant Professor, individual teaching and course development: **Information Technology Security**, Department of Informatics, Technological Educational Institute of Athens (December 2014 - September 2018).

- [4.6] Lecturer, individual teaching and course development: **Numerical Analysis and Applications I**, Department of Informatics, Technological Educational Institute of Athens (February 2003 - December 2014).
- [4.5] Lecturer, individual teaching and course development: **Numerical Analysis II**, Department of Informatics, Technological Educational Institute of Athens (February 2003 - December 2014).
- [4.4] Lecturer, individual teaching and course development: **Introduction to Informatics**, Department of Informatics, Technological Educational Institute of Athens (February 2003 - December 2014).
- [4.3] Lecturer, individual teaching and course development: **Information Technology Security**, Department of Informatics, Technological Educational Institute of Athens (February 2003 - December 2014).
- [4.2] Part-time Lecturer (Adjunct Staff with PD 407/80), individual teaching and course development (laboratory part): **Programming Methodologies and Languages, Software Engineering, Computer Security and Data Protection, Scientific Computing, Compilers and Interpreters, Operating Systems, IT Applications, Software Design, Data Structures**, Dept. of Information and Communication Systems Engineering, School of Sciences, University of the Aegean (September 2000 - August 2002).
- [4.1] Part-time Lecturer (Adjunct Staff), individual teaching and course development (laboratory part): **Numerical Analysis & Applications I, Numerical Analysis II, Scientific Applications Programming, FORTRAN Programming Language I, FORTRAN Programming Language II**, Dept. of Informatics, School of Technological Applications, Technological Educational Institution (TEI) of Athens (September 1995 - January 2003).

5. RESEARCH AND PROFESSIONAL EXPERIENCE

Research Interests

My areas of expertise and research interests fall into the fields of Information and Communication Systems Security, Intrusion Detection, and Game Theory Approaches in Cybersecurity.

Research Contribution

I have been active in the fields of my research interests since 1992, with the start of my M.Sc. by research, which I completed in July 1994, at University College Dublin (UCD), National University of Ireland. My research then focused exclusively on Attack

Detection for Secure Computer Systems. At the same time, I joined the Computer Networks and Distributed Systems Research Group (CNDSRG) at the Dept. of Computer Science, UCD, and undertook part of the SEISMED (A Secure Environment for Information Systems in Medicine) project of the AIM (Advanced Informatics in Medicine) program of the EU. My research was funded by TELTEC IRELAND LTD and I also received a scholarship from the Irish government. Within the framework of the SEISMED project I mainly dealt with Network Security in Hospitals and in general in Health Care Environments, and I started publishing in the area of Computer Security in 1994. This area has been my main field of research interest ever since.

In 2011 I completed my Ph.D. thesis in Intrusion Detection with Game Theory, which has since been an area of my research interest for application to sub-areas of security. My research focused on the profile of insider attackers and the Quantal Response Equilibrium, an extension of the Nash Equilibrium that was chosen as a solution approach to the problem. My research contribution in the field of security extends to health information system security, intrusion detection, game theoretic modeling of information and communication system security problems, network security, cyber ranges, cyber security in critical infrastructures, security in cyber physical systems and security distributed systems.

My research activity to date includes 55 books, book chapters, publications in scientific journals, and publications in conference proceedings. According to Google Scholar, my research work has been cited 300 times and my h-index is 10.

Head of Research Group

Head of the [INSSec](#) (Information, Network, and System Security) Research Group. The team was developed and formulated gradually through the continuous participation in the last decade in cyber defense exercises, National and NATO exercises, which were organized by Hellenic National Defence General Staff (HNDGS). In 2018, the group joined the Research Laboratory of Parallel and Distributed Systems and Networks ([PDSN](#)) at the Department of Informatics and Computer Engineering, School of Engineering, University of West Attica.

Activities and achievements of the **INSSEC team** include but are not limited to the following:

- [5.35] Organization of the **UNIWA CTF 2022** competition for greek Universities, 8-10 July 2022, 48 hours duration, **1st position: Team of Technical University of Crete.**
- [5.34] Organization of the **CTF** competition for the international program “EESTech Challenge” of the University of Patras, 13 April 2021, 5 hours duration.
- [5.33] Organization of the **UNIWA CTF 2021** competition for greek Universities, 22-24 January 2021, 48 hours duration, **1st position: Team of Technical University of Crete.**
- [5.32] Organization of the **UNIWA CTF 2019** competition for greek Universities, 19 December 2019, 12 hours duration.
- [5.31] Participation in the HTB UniCTF 2020 competition (**Finals**) with 600 universities, **Distinction: 16th position worldwide**, 25-26 March 2022.
- [5.30] Participation in the HTB UniCTF 2021 competition (**Qualifiers**) with 600 universities, **Distinction: 16th position worldwide**, 19-21 November 2021.
- [5.29] Participation in the HTB UniCTF 2020 competition (**Finals**) with 200 universities, **Distinction: 2nd position worldwide**, 5-6 March 2021.
- [5.28] Participation in the HTB UniCTF 2020 (**Qualifiers**) with 200 universities, **Distinction: 3rd position worldwide**, 20-22 November 2020.
- [5.27] Participation in NATO Cyberdefense Exercises “Cyber Coalition”, 2012 and 2014.
- [5.26] Participation in 13 National Cyberdefense Exercises PANOPTIS, annual event organized by the Hellenic National Defence General Staff (HNDGS), 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.

Participation in Evaluation Committees and Expertises

- [5.25] Physical Object Certifier, Physical Object Certification Control of the project "Development of an Innovative End-User Tool for the Protection from Electronic 'Phishing' Attacks”, project code T1EDK-05112 (interim evaluation), Special Service for the Management and Implementation of Actions in the Research, Technological Development and Innovation (EYDE-ETAK), Ministry of Development and Investments (December 2020).

- [5.24] Evaluator of proposals of the EDBM34 call of the OP Human Resource Development, Education and Lifelong Learning (EYD OP ANAD EDBM), Special Service for the Management and Implementation of Actions in the Research, Technological Development and Innovation Sectors (EYDE-ETAK), Ministry of Education, Research and Religion (February 2019).
- [5.23] Proposal evaluator, Cycle B' - Single Action of State Support for Research, Technological Development and Innovation "RESEARCH - CREATE - INNOVATE" Intervention II: "Business Partnerships with Research Organizations", Special Service for Management and Implementation of actions in the fields of Research, Technological Development and of Innovation (EYDE-ETAK), Ministry of Economy and Development (September 2019).
- [5.22] Expert, Final Evaluation of the project "Development of a Geo-Environmental Information System for the Region of Central Greece - GENCENG", project code 11SYN-8-1213, Special Service for the Management and Implementation of Actions in the Research, Technological Development and Innovation Sectors (EYDE-ETAK), Ministry of Education, Research and Religious Affairs (October 2016).
- [5.21] Expert, Final Evaluation of the "DYNACARGO: Dynamic Cargo Routing in Motion" project with code 11SYN-10-456, Special Service for the Management and Implementation of Actions in the Research, Technological Development and Innovation Sectors (EYDE-ETAK), Ministry of Education, Research and Religions (October 2015).
- [5.20] Expert, Physical Object Certification Control of the project "DYNACARGO: Dynamic Cargo Routing on the move" with code 11SYN-10-456 (interim evaluation), Special Service for the Management and Implementation of Actions in the Research, Technological Development and Innovation Sectors (EYDE-ETAK), Ministry of Education, Research and Religious Affairs (June 2015).

Participation in National and International Programs

- [5.19] Member of the main research group of the Archimedes program (EPEAEK II) entitled "Methodology for designing systems for personalized access to telematic services of educational Intranets using intelligent agents", October 2003 – September 2006.
- [5.18] Participation in PE4 "Creation of Electronic Teaching and Examination Material" and PE9 "Viewing, Information and Communication" of the EPEAEK program, 2004 - 2005.
- [5.17] Scientific Program Manager for the group of the educational unit "Informatics Professions", Vocational Training Center (K.E.K) AKMON, November 2000-November 2002.

- [5.16] Provision of services "Study and Management of Network Services in Internet-type Wide Area Networks" in the field of Information Technology for the project "Management of Network Services with Quality Assurance" - PENED '99, University Research Institute of Communications and Computer Systems (EPISEY), January 2000-June 2001.
- [5.15] Provision of "Electronic Assessment Support" services in the "Ialyssos – 500" project, University of the Aegean, October 1999-December 1999.
- [5.14] Participation in action 2:13b5 entitled "Experimental development and operation of new communication, information and information management services" of the "Program for the adaptation of human resources to modern technologies supporting port activities." Application in the Port of Patras" within the framework of the "ADAPT Community Initiative - Adaptation of the Workforce to the Industrial Initiative", Technological Educational Institute (TEI) of Athens, January 1998-September 1999.
- [5.13] Member of the research team for the project "Development of optimal preventive maintenance methods in production systems with storage areas", University of the Aegean, June 1996-July 1995.
- [5.12] Member of the research team for the program "On site electromagnetic field measurements for telecommunication and industrial applications", University of the Aegean, January 1996-December 1998.
- [5.11] Member of the research group for a European research program, as a programmer (C in SUN OS and SAS statistical software suite), Hellenic Society of Nutrition & Food, Athens School of Hygiene, January 1996-June 1996.
- [5.10] Member of the Computer Networks and Distributed Systems Research Group (CNDSRG) of the Department of Computer Science, University College Dublin (UCD), National University of Ireland, for the SECURENET II project of the EU RACE (Research in Advanced Communications for Europe) program, Ireland, February 1995 - December 1995.
- [5.9] Providing research work as an IT Engineer. KYROS, December 1994-January 1995.
- [5.8] Member of the Computer Networks and Distributed Systems Research Group (CNDSRG) of the Department of Computer Science, University College Dublin (UCD), National University of Ireland, for the EU AIM (Advanced Informatics in Medicine) program, the SEISMED (A Secure Environment for Information Systems in Medicine) project, Ireland, July 1992-November 1994.
- [5.7] Member of the research team for the project "Software Development for the National Center for Immediate Assistance (EKAB) and its Connection

with Hospitals", funded by the Ministry of Health, Welfare and Social Insurance. The new system was implemented in a UNIX environment using a DBMS (INGRES). In December 1990, a summary of the study was published by New Technologies Publications. Department of Informatics, Technological Educational Institute (TEI) of Athens, November 1989-June 1991 & October 1991-June 1992.

Additional Professional Activities

- [5.6] Member of the Coordinating Committee, Master's Program "New Generation Communication Networks and Distributed Applications Environments", Department of Informatics and Computer Engineering, University of West Attica (April 2021 - present).
- [5.5] Member of the Strategic Planning Committee, the Department of Informatics and Computer Engineering, University of West Attica (April 2020 - present).
- [5.4] Member of the Advisory Committee for the Evaluation of Adjunct Staff Candidates, Department of Informatics and Computer Engineering, University of West Attica (2018 - 2019).
- [5.3] Chairman of the Advisory Committee for the Evaluation of Laboratory and Scientific Associates, Department of Informatics, Technological Educational Institute of Athens (2017-2018).
- [5.2] Member of the Advisory Committee for the Evaluation of Laboratory and Scientific Associates, Department of Informatics, Technological Educational Institute of Athens (2016-2017).
- [5.1] Head of the Committee for the Implementation of the Electronic Open Tender for the supply of Computers for the needs of the laboratories of the Schools of T.E.I. of Athens, (proclamation no.: 4411/12-05-2015), Technological Educational Institute of Athens (May 2015).

6. SCHOLARLY ACCOMPLISHMENTS

Theses

- [6.55] Ioanna Kantzavelou «Intrusion Detection in Information Technology Security», Ph.D. Thesis, Department of Information and Communication Systems Engineering, School of Sciences, University of the Aegean, 2011.
- [6.54] Ioanna Kantzavelou, "An Attack Detection System for Secure Computer Systems", M.Sc. Dissertation, Dept. of Computer Science, University College Dublin, National University of Ireland, 1994.

Books

- [6.53] Mohamed Amine Ferrag, **Ioanna Kantzavelou**, Leandros Maglaras, and Helge Janicke, Editors, "Hybrid Threats, Cyberterrorism and Cyberwarfare", CRC Press, 2023 (signed agreement 24/1/2022).
- [6.52] Leandros Maglaras, **Ioanna Kantzavelou**, Mohamed Amine Ferrag, Editors, "Cybersecurity of Critical Infrastructures: Challenges and Solutions", MDPI AG, 2021, ISBN 978-3-0365-2726-0 (Hbk), <https://www.mdpi.com/books/pdfdownload/book/4750>.
- [6.51] Leandros Maglaras and **Ioanna Kantzavelou**, Editors, "Cybersecurity Issues in Emerging Technologies", CRC Press, 2021, ISBN 9780367626174.
- [6.50] SEISMED Consortium (Ed.), Data Security for Health Care: Management Guidelines, Volume I, IOS Press, Amsterdam, Vol. 31, 1996, ISBN 978-90-5199-264-9.
- [6.49] SEISMED Consortium (Ed.), Data Security for Health Care: Technical Guidelines, Volume II, IOS Press, Amsterdam, Vol. 32, 1996, ISBN 978-90-5199-265-6.
- [6.48] SEISMED Consortium (Ed.), Data Security for Health Care: User Guidelines, Volume III, IOS Press, Amsterdam, Vol. 33, 1996, ISBN 978-90-5199-266-3.

Book Chapters

- [6.47] **Ioanna Kantzavelou** and Vassilis Katos, "Digital Forensics", in the collective volume "Security of Information & Systems in Cyberspace", Sokratis Katsikas, Stefanos Gritzalis, and Konstantinos Lambrinouidakis (Scientific Editors), New Technologies Publications, 2021.
- [6.46] Panagiotis Efstathiadis, Anna Karanika, Nestoras Chouliaras, Leandros Maglaras, **Ioanna Kantzavelou**, "Smart Cars and Over-the-Air Updates", Chapter in Cybersecurity Issues in Emerging Technologies, CRC Press, 2021.
- [6.45] Nathan Clark, Leandros Maglaras, **Ioanna Kantzavelou**, Nestoras Chouliaras, Mohamed Amine Ferrag, "Blockchain Technology: Security and Privacy Issues", In: Patnaik, S., Wang, TS., Shen, T., Panigrahi, S.K. (eds) Blockchain Technology and Innovations in Business Processes. Smart Innovation, Systems and Technologies, vol 219. Springer, Singapore, March 2021, https://doi.org/10.1007/978-981-33-6470-7_6.
- [6.44] **Ioanna Kantzavelou** and Sokratis K. Katsikas. 2013. Uncertainty in Intrusion Detection Signaling Games. In Public Key Infrastructures,

Services and Applications, 2013, Katsikas and Agudo (Eds), Lecture Notes in Computer Science, Vol. 8341, pp. 184-203, Springer Berlin Heidelberg, DOI=10.1007/978-3-642-53997-8_12.

- [6.43] A. Patel, **I. Kantzavelou**, C. Clissman and D. Maroulis, "Network Security Guidelines for Health Management" in Data Security for Health Care, Volume I Management Guidelines, Edited by the SEISMED Consortium, IOS Press, Vol. 31, pp. 135-184, 1996.
- [6.42] A. Patel, **I. Kantzavelou**, C. Clissman and D. Maroulis, "Network Security Guidelines for Health IT and Security Personnel" in Data Security for Health Care, Volume II Technical Guidelines, Edited by the SEISMED Consortium, IOS Press, Vol. 32, pp. 343-394, 1996.
- [6.41] A. Patel, **I. Kantzavelou**, C. Clissman and D. Maroulis, "Network Security Guidelines for Health Care System Users" in Data Security for Health Care, Volume III User Guidelines, Edited by the SEISMED Consortium, IOS Press, Vol. 33, pp. 115-165, 1996.
- [6.40] A. Patel and **I. Kantzavelou**, "Issues of Security and Network Security in Health Care Information Systems" in Towards Security in Medical Telematics: Legal and Technical Aspects, Barber B, Treacher A, and Louwse K (Eds), IOS Press, Vol. 27, pp. 216-223, 1996.

Journal Publications

- [6.39] **Ioanna Kantzavelou**, Leandros Maglaras, Panagiotis Tzikopoulos, Sokratis Katsikas, 2022, "**A Multiplayer Game Model to Detect Insiders in Wireless Sensor Networks**", PeerJ Computer Science, 8:e791 <https://doi.org/10.7717/peerj-cs.791>.
- [6.38] Leandros A. Maglaras, **Ioanna Kantzavelou**, Mohamed Amine Ferrag, "Digital Transformation and Cyber security of Critical Infrastructures", Applied Sciences (MDPI), September 2021, DOI: 10.3390/app11188357.
- [6.37] Anagnostopoulos, T., Kostakos, P., Zaslavsky, A., **Kantzavelou, I.**, Tsotsolas, N., Salmon, I., Morley, J. Harle, R., "Challenges and Solutions of Surveillance Systems in IoT-Enabled Smart Campus: A Survey," in IEEE Access, vol. 9, pp. 131926-131954, 2021, doi: 10.1109/ACCESS.2021.3114447.
- [6.36] Chouliaras, N.; Kittes, G.; **Kantzavelou, I.**; Maglaras, L.; Pantziou, G.; Ferrag, M.A. Cyber Ranges and TestBeds for Education, Training, and Research. *Appl. Sci.* **2021**, *11*, 1809. <https://doi.org/10.3390/app11041809>
- [6.35] Fraser Hall, Leandros Maglaras, Theodoros Aivaliotis, Loukas Xagorakis, **Ioanna Kantzavelou**, "Smart Homes: Security Challenges and Privacy

Concerns", International Journal of Computers, NAUN, November 2020, DOI: 10.46300/9108.2020.14.5

- [6.34] **Ioanna Kantzavelou** and Sokratis K. Katsikas. 2010. A Game-based Intrusion Detection Mechanism to Confront Internal Attackers. Computers & Security, Vol. 29, No 8, November 2010, pp. 859-874, ISSN 0167-4048, doi: 10.1016/j.cose.2010.06.002.
- [6.33] Georgouli, K., Kiliyas, C., **Kantzavelou, I.** and Zahariou, P., "Enhancing Traditional Teaching through e-Learning Activities at the Department of Informatics at the TEI of Athens", e-Journal of Science & Technology (e-JST), ISSN 17905613, Vol. 3, 2006, http://e-jst.teiath.gr/eng/trito_teuxos_eng.htm.
- [6.32] **I. Kantzavelou**, "A Virtual Lab Model for an Introductory Computer Science Course", FACTA UNIVERSITATIS (NIS) Series: Electronics and Energetics, Special Issue on Computer Science Education, Vol. 18, No. 2, August 2005, pp. 263-274.

Publications in Conference Proceedings (peer reviewed)

- [6.31] E. D. Charitos, N. A. Kounalakis and I. Kantzavelou, "Cybersecurity at Merchant Shipping," 2022 IEEE International Conference on Cyber Security and Resilience (CSR), 2022, pp. 394-399, doi: 10.1109/CSR54599.2022.9850294.
- [6.30] Vassilis Papaspirou, Maria Papathanasaki, Leandros Maglaras, Ioanna Kantzavelou, Christos Douligeris, Mohamed Amine Ferrag and Helge Janicke, "Security Revisited: Honeytokens meet Google Authenticator", 7th South-East Europe Design Automation, Computer Engineering, Computer Networks and Social Media Conference (SEEDA-CECNSM 2022), 23-25 September 2022, Ioannina, Greece.
- [6.29] Taha Abdelgalil, Vasileios Manolas, Leandros Maglaras, **Ioanna Kantzavelou**, Mohamed Amine Ferrag, "**Blockchain Technology: A case study in supply chain management**", Third IEEE International Conference on Trust, Privacy and Security in Intelligent Systems, and Applications, December 13 - 15, 2021.
- [6.28] Vasileios Dimitriadis, Leandros Maglaras, Nineta Polemi, **Ioanna Kantzavelou**, Nick Ayres, "**Uncuffed: A Blockchain-based Secure Messaging System**", 25th Pan-Hellenic Conference on Informatics (PCI 2021), Volos, Greece, November 26-28, 2021.
- [6.27] Vassilis Papaspirou, Leandros Maglaras, Mohamed Amine Ferrag, **Ioanna Kantzavelou**, Helge Janicke, Christos Douligeris, "A novel Two-Factor HoneyToken Authentication Mechanism", 30th IEEE International Conference on Computer Communications and Networks (ICCCN 2021), July 19-22 2021.

- [6.26] Thaleia-Elpis Kavalierou and **Ioanna Kantzavelou**, “The Smart Contract Guard Model”, Poster Presentation in the 3rd Summit on Gender Equality in Computing (GEC 2021), Athens, July 2 2021.
- [6.25] Dimitrios Tsiostas, George Kittes, Nestoras Chouliaras, **Ioanna Kantzavelou**, Leandros Maglaras, Christos Douligeris and Vasileios Vlachos, "The insider threat: Reasons, Effects and Mitigation Techniques", 24th Pan-Hellenic Conference on Informatics (PCI 2020), Athens, Greece, November 20th-22nd, 2020, DOI: 10.1145/3437120.3437336.
- [6.24] Anthi Kakagi and **Ioanna Kantzavelou**, “Mitigating the Internal Attackers in Enterprises”, Poster Presentation in the 1st Summit on Gender Equality in Computing (GEC 2019), Athens, June 7 2019.
- [6.23] Dimitrios Kontogeorgis, Konstantinos Limniotis, and **Ioanna Kantzavelou**. 2018. An evaluation of the HTTPS adoption in websites in Greece: estimating the users awareness. In Proceedings of the 22nd Pan-Hellenic Conference on Informatics (PCI '18). Association for Computing Machinery, New York, NY, USA, 46–51. DOI:<https://doi.org/10.1145/3291533.3291556>.
- [6.22] Aristeidis Koutsouras, Dimosthenis Kougioumoutzakis, and **Ioanna Kantzavelou**. 2015. Assessment and security issues in cloud computing services. In Proceedings of the 19th Panhellenic Conference on Informatics (PCI '15). Association for Computing Machinery, New York, NY, USA, 165–166. DOI:<https://doi.org/10.1145/2801948.2802030>.
- [6.21] **Ioanna Kantzavelou** and Sokratis K. Katsikas. 2013. Uncertainty in Intrusion Detection Signaling Games. Presented in the 10th European Workshop on Public Key Infrastructures, Services and Applications (EuroPKI '13), September 12-13 September 2013, RHUL, Egham, published in Public Key Infrastructures, Services and Applications, Lecture Notes in Computer Science, Volume 8341, 2014, edited by S.K. Katsikas and I. Agudo, Springer Berlin Heidelberg, pp 184-203, 1-1-2014, doi:10.1007/978-3-642-53997-8_12.
- [6.20] **Kantzavelou, Ioanna**, Tzikopoulos F. Panagiotis, and Sokratis K. Katsikas. 2013. Detecting Intrusive Activities from Insiders in a Wireless Sensor Network using Game Theory. In Proceedings of the 6th International Conference on Pervasive Technologies Related to Assistive Environments (PETRA'13), May 29 - 31, 2013, Island of Rhodes, Greece, ACM.
- [6.19] **Kantzavelou, Ioanna** and Sokratis K. Katsikas. 2009. Playing Games with Internal Attackers Repeatedly. In Proceedings of the 16th International Workshop on Systems, Signals and Image Processing (IWSSIP '09), (invited paper), Chalkida, Greece, 18-20 June, 2009, pp. 1-6, doi:10.1109/IWSSIP.2009.5367708.

- [6.18] **Kantzavelou, Ioanna** and Sokratis K. Katsikas. 2008. A Generic Intrusion Detection Game Model in IT Security. In Proceedings of the 5th International Conference on Trust, Privacy and Security in Digital Business (TrustBus '08) (Turin, Italy, September 4 - 5, 2008). S. Furnell, S. K. Katsikas, and A. Lioy (Eds.). Lecture Notes in Computer Science, vol. 5185. Springer-Verlag, Berlin, Heidelberg, pp. 151-162, doi: 10.1007/978-3-540-85735-8_15.
- [6.17] Georgouli, K., **Kantzavelou, I.**, Guerreiro, P. and Koiliadis, C., "Enhancing Student Learning Using Asynchronous e-Learning Platforms", in Proc. of the IADIS International Conference on Cognition and Explanatory Learning in Digital Age (CELDA 2006), Barcelona, December 2006, pp. 73-80.
- [6.16] K. Georgouli, **I. Kantzavelou**, I. Skalkidis, P. Zaxariou, "Integrating an Open Source LMS into the traditional Educational Process", in Proc. of the 2005 WSEAS International Conference on Engineering Education, Vouliagmeni, Athens, Greece, July 8-10, 2005, pp. 300-308.
- [6.15] **I. Kantzavelou** and S. Katsikas, "An Attack Detection System for Secure Computer Systems - Outline of the Solution", The 13th International Information Security Conference (IFIP SEC '97), 14-16 May 1997, Copenhagen, Denmark, also published in Information Security in Research and Business, edited by L. Yngström and J. Carlsen, Chapman & Hall, pp. 123-135, 1997.
- [6.14] **I. Kantzavelou** and A. Patel, "An Attack Detection System for Secure Computer Systems - Design of the ADS", The 12th International Information Security Conference (IFIP SEC '96), 21-24 May 1996, Island of Samos, Greece, also published in Information Systems Security: Facing the information society of the 21st century, edited by S. Katsikas & D. Gritzalis, Chapman & Hall, pp. 337-347, 1996.
- [6.13] **I. Kantzavelou** and A. Patel, "Issues of Attack in Distributed Systems - A Generic Attack Model", The Joint Working Conference IFIP TC-6 TC-11 and Austrian Computer Society, September 20-21, 1995, Graz, Austria, also published in Communications and Multimedia Security, edited by R. Posch, Chapman & Hall, pp. 1-16, 1995.
- [6.12] **I. Kantzavelou** and A. Patel, "Implementing Network Security Guidelines in Health Care Information Systems", in Proc. of the 8th World Congress on Medical Informatics, July 1995, Vancouver, Canada.
- [6.11] D. Gritzalis, **I. Kantzavelou**, S. Katsikas and A. Patel, "A Classification of Health Care Information System Security Flaws", in Proc. of the 11th International Information Security Conference (IFIP SEC '95), J. Ellof, et al. (Eds), Chapman & Hall, May 1995, Capetown, South Africa, pp. 453-464.

- [6.10] A. Patel and **I. Kantzavelou**, "Issues of Security and Network Security in Health Care Information Systems" in Proc. of the 12th International Congress of the European Federation for Medical Informatics, May 1994, Lisbon, pp. 493-498.

Other Publications

- [6.9] Gerodimos, A.; Maglaras, L.; Kantzavelou, I.; Ayres, N. IoT: Communication Protocols and Security Threats. *Preprints* **2021**, 2021110214 (doi: 10.20944/preprints202111.0214.v2).
- [6.8] Vasilis Papaspirou, Maria Papathanasaki, Leandros Maglaras, **Ioanna Kantzavelou**, Christos Douligeris, Mohamed Amine Ferrag, Helge Janicke, "Cybersecurity Revisited: Honeytokens meet Google Authenticator", December **2021**, arXiv:2112.08431 [**cs.CR**].
- [6.7] Vassilis Papaspirou, Leandros Maglaras, Mohamed Amine Ferrag, **Ioanna Kantzavelou**, Helge Janicke, Christos Douligeris, "A novel Two-Factor HoneyToken Authentication Mechanism", December **2020**, arXiv:2012.08782v3 [**cs.CR**].
- [6.6] Fraser Hall, Leandros Maglaras, Theodoros Aivaliotis, Loukas Xagoraris, **Ioanna Kantzavelou**, "Smart Homes: Security Challenges and Privacy Concerns", October **2020**, arXiv:2010.15394v1 [**cs.CR**].
- [6.5] **Ioanna Kantzavelou**, "Information Security Study", Sub-Action 5.1 "Security of personal data DASTA", Action 5: "Security of personal data DASTA - Development of a code of ethics of the structures", "EMPLOYMENT & CAREER STRUCTURE OF THE SCHOOL OF TEACHING AND TECHNOLOGICAL EDUCATION (A.S.PAI.TE.)", Operational Program: "Education and Lifelong Learning", November 2013, <http://repository.edulll.gr/2742>.

Participation in Symposia

- [6.4] **I. Kantzavelou**, "Computer Forensics: The Legal Side of Incident Response", Symposium on Innovation of Computer Science Curriculum in Higher Education: Retraining of Young Teaching Staff, TEMPUS project, Joint European Project CD_JEP-16160-2001, 24 – 27 February 2004, Department of Informatics, Technological Educational Institute of Athens, Greece.

Participation in Summits

- [6.3] **Ioanna Kantzavelou**, "Representing Intrusion Detection in IT Security as a Game", Two-day Conference for Doctoral Candidates, Department of

Information & Communication Systems Engineering, University of the Aegean, 22 – 23 October 2004, Karlovasi, Samos.

- [6.2] **Ioanna Kantzavelou**, “A Generic Intrusion Detection Game Model in IT Security”, Two-day Conference for Doctoral Candidates, Department of Information & Communication Systems Engineering, University of the Aegean, 22 – 23 May 2009, Karlovasi, Samos.

Webcasts

- [6.1] **Ioanna Kantzavelou**, «Preventing Intrusions by Insiders: A Game-Theoretic Approach». Speech given on Jan 12, 2010, webcast, at the Information Security Channel of BrightTALK, accessed July 2021, <https://secure.brighttalk.com/webcast/288/5720>.

7. EDITORIAL ACTIVITIES

Steering Committees of International Conferences

- [7.1] Vice-chair in ACM GEC (2022-2024) 4th, 5th, and 6th Summit on Gender Equality in Computing, Greece.

Guest Editor in Scientific Journals

- [7.2] Leandros Maglaras, **Ioanna Kantzavelou**, Mohamed Amine Ferrag, Journal of Applied Sciences (ISSN 2076-3417), 2021, MDPI, Special Issue entitled: “Cyber Ranges, Testbeds and Digital Twins”, section “Electrical, Electronics and Communications Engineering”.
- [7.3] Leandros Maglaras, **Ioanna Kantzavelou**, Mohamed Amine Ferrag, Journal of Applied Sciences (ISSN 2076-3417), 2021, MDPI, Special Issue entitled: “Cyber Security of Critical Infrastructures”, section “Computing and Artificial Intelligence”.
- [7.4] Leandros Maglaras, Antonios Argyriou, Sotiris Moschoyiannis, Athanasios Maglaras, **Ioanna Kantzavelou**, Journal of Energies (ISSN 1996-1073), 2021, MDPI, Special Issue entitled: “Smart Electric Vehicles: Optimization, Security and Privacy Issues”, section “Electric Vehicles”.

Reviewer in Scientific Journals

- [7.56] IEEE Access
- [7.55] PeerJ Computer Science.
- [7.54] International Journal of Electronic Governance, Interscience Publishers.

- [7.53] Computers, MDPI.
- [7.52] Energies, MDPI.
- [7.51] Sensors, MDPI.
- [7.50] Computers & Security, Elsevier.
- [7.49] Information Management & Computer Security, Emerald.
- [7.48] International Journal of Information Security, Springer.
- [7.47] Majlesi Journal of Electrical Engineering.
- [7.46] Computer Communications, Elsevier.
- [7.45] IEEE Transactions on Information Forensics and Analysis.
- [7.44] International Journal of Innovation and Regional Development (IJIRD).

Program Committee member in International Conferences

- [7.43] ICA3PP 2022, 22nd International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2022), Copenhagen, Denmark (Online) | 10-12 October 2022.
- [7.42] 27th IEEE Symposium on Computers and Communications (IEEE ISCC 2022), 30th June - 3rd July 2022, Rhodes Island, Greece.
- [7.41] IEEE ISCC 2021, 26th Symposium on Computers and Communications, to be held on 5-8 September 2021, in Athens, Greece.
- [7.40] ACM GEC 2021, 3rd Summit on Gender Equality in Computing, July 2, 2021, Athens, Greece.
- [7.39] IEEE INFOCOM 2021, IEEE International Conference on Computer Communications, May 2021, Virtual Conference.
- [7.38] PCI 2021, 25th Panhellenic Conference on Informatics with international participation, 26 - 28 November 2021, Volos, Greece, Proceedings by ACM.
- [7.37] SMART-TECH 2020, 1st International Conference on Smart Systems and Emerging Technologies, Cyber-Security Track Committee, November 3-5, 2020, Prince Sultan University, Riyadh, Saudi Arabia.
- [7.36] IEEE ICS 2020, International Conference on Internet of Things and Intelligent Applications, November 2020, Zhenjiang, China.
- [7.35] PCI 2020, 24th Panhellenic Conference on Informatics with international participation, November 2020, Athens, Greece, Proceedings by ACM.
- [7.34] e-Democracy 2019, 8th International Conference on e-Democracy, December 2019, Athens, Greece.

- [7.33] ACM GEC 2019, 1st Summit on Gender Equality in Computing, June 7, 2019, Athens, Greece.
- [7.32] PCI 2018, 22th Panhellenic Conference on Informatics with international participation, December 2018, Athens, Greece, Proceedings by ACM.
- [7.31] ICCE 2018, C7: ICCE Sub-Conference on Practice-driven Research, Teacher Professional Development and Policy of ICT in Education (PTP), November 2018, Manila, Philippines.
- [7.30] e-Democracy 2017, 7th International Conference on e-Democracy, December 2017, Athens, Greece.
- [7.29] e-Democracy 2015, 6th International Conference on e-Democracy, December 2015, Athens, Greece.
- [7.28] PCI 2015, 19th Panhellenic Conference on Informatics with international participation, October 2015, Athens, Greece, Proceedings by ACM.

Reviewer in International Conferences

- [7.27] ESORICS 2020, 25th European Symposium on Research in Computer Security, Guildford, United Kingdom, September, 2020.
- [7.26] ACM SEC@SAC13 2013, the 12th edition of the Computer Security track at the 28th ACM Symposium on Applied Computing, 18-22 March 2013, Coimbra, Portugal.
- [7.25] ACM SEC@SAC12 2012, the 11th edition of the Computer Security track at the 28th ACM Symposium on Applied Computing, 26-30 March 2012, Riva del Garda (Trento), Italy.
- [7.24] IEEE TrustCom 2011, the 10th IEEE International Conference on Trust, Security and Privacy in Computing and Communications, November 16-18, 2011, Changsha, China.
- [7.23] ISC 2011, 14th Information Security Conference, 26-29 October, 2011, Xi'an China.
- [7.22] NSS 2011, 5th International Conference on Network and System Security, September 6-8, 2011, Milan, Italy.
- [7.21] SECRIPT 2011, the International Conference on Security and Cryptography, July 18-21, 2011, Seville, Spain.
- [7.20] NSS 2010, 4th International Conference on Network and System Security, September 1-3, 2010, Melbourne, Australia.
- [7.19] WISTP 2010, 4th IFIP WG 11.2 International Workshop in Information Security Theory and Practice, "Security and Privacy of Pervasive Systems and Smart Devices", April 13-14, 2010, Passau, Germany.

- [7.18] SEC '09, 24th IFIP International Information Security Conference, "Emerging Challenges for Security, Privacy and Trust", May 18-20, 2009, Coral Beach Hotel, Pafos, Cyprus.
- [7.17] ACM SAC '09, 24th Annual ACM Symposium on Applied Computing, 8 - 12 March 2009, Honolulu, Hawaii, USA.
- [7.16] ACM SAC '08, 23rd Annual ACM Symposium on Applied Computing, Fortaleza, Cearà, Brazil, March 16 - 20, 2008.
- [7.15] ACM SAC '07, 22nd Annual ACM Symposium on Applied Computing, COEX Convention Center Seoul, Korea, March 11 - 15, 2007.
- [7.14] SEC '06, 21st IFIP International Information Security Conference, "Security and Privacy in Dynamic Environments" 22-24 May, 2006, Karlstad University, Karlstad, Sweden.
- [7.13] IEEE AINA '06, 20th International Conference on Advanced Information Networking and Applications, 18-20 April, 2006, Vienna University of Technology, Vienna, Austria.
- [7.12] EC2ND '06, 1st European Conference on Computer Network Defence, 15-16 December, 2005, School of Computing, University of Glamorgan, UK.
- [7.11] ACM SAC '06, 21st ACM Symposium on Applied Computing, Track on Computer Security (5th edition), 23-27 April, 2006, Dijon, France.
- [7.10] IEEE CIS '05, International Conference on Computational Intelligence and Security, December 15-19, 2005, Xi'an, China.
- [7.9] TrustBus '05, 2nd International Conference on Trust, Privacy, and Security in Digital Business, August 22-26, 2005, Copenhagen, Denmark.
- [7.8] SEC '05, 20th IFIP International Information Security Conference, 30th May - 1st June, 2005, Makuhari Messe, Chiba, JAPAN.
- [7.7] ACM SAC '05, 20th Annual ACM Symposium on Applied Computing, Track on Computer Security (4th edition), March 13-17, 2005, Santa Fe, New Mexico, USA.
- [7.6] ICICS '04, 6th International Conference on Information and Communications Security, October 27-29, 2004, Malaga, Spain.
- [7.5] ESORICS '04, 9th European Symposium on Research in Computer Security, September 13-15, 2004, Sophia Antipolis, France.

Organizing Committee member in International Conferences

- [7.4] IEEE CSR-MCS Workshop 2022, IEEE International Conference on Cyber Security and Resilience, Workshop on Maritime Cyber Security (MCS), July 27-29, 2022, virtual conference.

- [7.3] IEEE CSR-MCS Workshop 2021, IEEE International Conference on Cyber Security and Resilience, Workshop on Maritime Cyber Security (MCS), July 26, 2021, virtual conference.
- [7.2] ACM GEC 2021, 3rd Summit on Gender Equality in Computing, Athens, Greece, July 2, 2021.
- [7.1] WiDS Athens Forum 2021, Women in Data Science, A regional conference of the Stanford University WiDS initiative, Athens, Greece, May 1, 2021.

8. PARTICIPATION IN DOCTORAL DISSERTATION COMMITTEES

Supervisor

- [8.1] Vasilios Papaspyrou, PhD Thesis Topic: "Two-Factor Honey Token Authentication (2FHA)", Department of Informatics and Computer Engineering, University of West Attica, July 2021 (in progress).
- [8.2] Nestoras Chouliaras, Ph.D. Thesis Topic: "Cyber Ranges Systems for Education and Research", Department of Informatics and Computer Engineering, University of West Attica, January 2020 (in progress).

Member of the three-member Supervisory Advisory Committee

- [8.3] Leontios Sotiriadis, PhD Thesis Topic: "Resource Management and Data Processing Techniques in the Internet of Vehicles", Department of Informatics and Computer Engineering, University of West Attica, 20.11.2020 (in progress).

Member of the Seven-member Examination Committee

- [8.4] Athanasios Goudosis, Cognitive area of doctoral research: Applications of Identity-Based Cryptography in Electronic Government and Navigation, Department of Digital Systems, University of Piraeus, awarded PhD on 1.7.2021 (Supervisor: Prof. S. Katsikas).

9. PARTICIPATION IN SCIENTIFIC ORGANIZATIONS AND PROFESSIONAL ASSOCIATIONS

- [9.1] Member: ACM-W Greece, (2019-).
- [9.2] Member: IEEE, IEEE Computer Society, Cyber Security, IEEE Computer Society Technical Community on, Dependable Computing and Fault

Tolerance, IEEE Computer Society Technical Committee on, Security and Privacy, IEEE Computer Society Technical Committee on, (2000-present).

[9.3] Member: ACM professional, ACM Special Interest Groups on: Security Audit and Control, Security, (2000-present).

[9.4] Member of the Hellenic Society of Computer and Informatics Scientists (EPY), (1991-present).

10. DISTINCTIONS

[10.1] Outstanding Reviewer, Computer Communications Journal, Elsevier, 2017.

[10.2] Listed in Top Reviewers, Computer & Security Journal, Elsevier, 2015.

[10.3] Scholarship from the Irish Government for research as part of my Masters by Research at the University College Dublin, National University of Ireland, 1992-1994.

11. CITATIONS

There are about 300 citations in the set of publications with the most important references to publications [6.14] and [6.15] found in the following book.

[11.1] J. Pieprzyk, T. Hardjono and J. Seberry, Fundamentals of Computer Security, Springer – Verlag, 2003.