

STERGIOPOULOS George

Assistant Professor | IT/OT Security and Data privacy
Dept. of Information and Communication Systems Engineering
University of the Aegean
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Work Experience

1. Assistant Professor - IT/OT Systems Security

University of the Aegean, Greece

Mar 2021 – Present

- Research work focuses on Industrial Systems Security (network, malware and attack prevention), Critical Infrastructure Protection (modeling and architecture for cybersecurity), IT and Network Security (malware communications, data leakage prevention avoidance), Risk Assessment and Data security and privacy. Published more than 40 articles in international journals and conference proceedings.
- Extended list with research project and published work can be found below in section “Selected Research Publications”.
- Research and Implementation positions include being the Principal Investigator and Lead Researcher for various projects and funds, including a project from the Google DNI Fund alongside University of Piraeus, Piraeus (Greece) implementing secure proximity testing cryptographic protocols for online distributed users (“WordofMouth” (WoM) project) and EU Horizon 2020 Oil and Gas industrial security and safety projects.

2. Subject Matter Expert (Contractor)

CEI Expert - European Union Agency for Cyber security (ENISA), EU

- CEI Expert participation in report for “Cyber security in the aviation sector” *Apr 2020 – Jul 2020*
 - [Redacted]
- CEI Expert: stock taking of good cyber security practices under NIS 2.0 *Feb 2021 – Apr 2021*
 - [Redacted]

Public Gas Corporation S.A. (DEPA), Greece

Jul 2019 – Nov 2021

- Cybersecurity and safety project expert. Technical cybersecurity services on:
 - Security of gas infrastructures, both cyber and physical.
 - Lead expert for end-user OT cybersecurity consulting and design implementation of the SecureGas solution.
 - Evaluation of current status and preparation of technical solutions for the implementation of new security and safety technologies in EU projects.
 - Preparation and submission of technical deliverable.

3. IT Security and Data Privacy Consultant (Contractor)

Mar 2012 – Present

- Consulted more than **30 clients** from both the public and private sector, including *banks, startups, finance companies, industrial system providers and public healthcare organisations*.
- More than seven (7) years of experience in IT/OT Risk assessment and Data Privacy Consulting for ISO 27001 ISMS development using internationally approved methodologies (CRAMM/UK, Pilar, MAGERIT).
- Assessments concern threats and risks on Critical Information Infrastructures, companies and organisations through governance, compliance, identification, and validation based on the ISO 27001:2013 standard. Consulting on both the private and the public sector This includes:
 - Cyber-physical and technical architecture analysis, design and risk Assessments of IT systems and software.
 - Building information security requirements and developing policies for software and systems, including mobile application security requirements, company policy documents, Security Plans,

Disaster Recovery and Business Continuity plans for deploying within an Information Security Management System.

- Assessing/consulting IT and dev teams during implementation of anti malware security measures based on OWASP, NIST and ISO 27000 series by identifying risks and proposing acceptable and mitigation strategies and technical solutions.
- Analysis of cyber-physical systems involving IT and building security management.
- **GDPR compliance consultant**
 - Managed and conducted more than 10 projects regarding GDPR compliance for companies.
 - Data mapping, Data Impact Assessments (DPIA) and preparedness in accordance with GDPR.

4. Agent on Network and Information Security (Full-time)

European Union Agency for Network and Information Security (ENISA)

Jan. 2019 – Jul. 2019

- Contribute to the areas of the Core Operations Department 1 (COD 1) and specifically for the NIS Directive, critical infrastructure protection (CIIP) & the Healthcare sector.
- Lead author for report: “*Power Sector Dependency: Attacks Against Time Sensitive Services*”, July 2019.
- Project involving the Energy and the Medical sector.
- Data analysis, desktop research, technical analysis, and editorial tasks.
- Collect and analyze existing publicly available material on threats, risks, and trends in NIS and emerging technologies application areas.
- Support performing detailed threat and risk analysis on two emerging technology/application areas from sectors: Critical infrastructure dependencies, healthcare and the energy sector.
- Assist in the organization of workshops and teleconferences in the areas mentioned above.

5. Principal Investigator - Lead Researcher

May 2015 – Jan 2019

Athens University of Economics and Business, Greece

- Lead researcher – “Weighted interdependency modeling for traffic flow congestion mitigation in the UK transportation system”.
- Modeling of congestion and flow analysis for protecting the Transportation Sector.
- Implementation (Java).

• **University of Piraeus, Greece**

Oct. 2018 – Present

- Lead researcher on “MELITY” project.
- Development of methodologies and integrated security solutions for the protection of medical pumps and relevant IOMT technologies used to provide / support in real-time healthcare (realtime e-health).

• **Google Digital News Innovation (DNI) Fund – University of Piraeus**

Feb. 2017 – August 2017

- Implementation of secure proximity testing cryptographic protocols for online mobile users.
- Lead researcher and R&D project manager for “Word of Mouth” (WoM) project at the University of Piraeus.
- Business Analysis & development (Android), business Impact analysis
- Technology utilization and implementation.

6. Information Systems and Network Penetration Tester

May 2015 – Jan 2019

Athens University of Economics and Business, Greece

- Penetration testing of information systems. Network analysis and assessment for potential vulnerabilities. Proof-of-Concept testing of vulnerabilities. Proficiency in tools:
 - Metasploit, Kali Linux, Burp Suite, Nessus, Armitage, Nmap etc.

7. IT Network Administrator

Athens University of Economics and Business, Greece

September 2012 - July 2015

- Preparation and operation of a computer laboratory and internal networks (LANs, Virtual Machines etc.).
- Operate, maintain and extend Windows and Linux servers and virtual machines powering development, staging and production environments.
- Automate everyday tasks and develop solutions to ease infrastructure operations.
- Monitor and improve the infrastructure's performance and security.
- Participate in debugging sessions and contribute to infrastructure design.

8. Software analyst

Hellenic National Defense General Staff, Cyber Defense Division, Greece

March 2011 – Nov. 2011

- Development of C/C++ and Java software.

Education

Athens University of Economics and Business

Nov. 2015

Ph. D. @ Software Security and Critical Infrastructure Protection analysis and modeling

- Research areas: Risk assessment, Interdependency analysis, software security, software engineering, source code analysis, vulnerability detection, critical infrastructure protection, graph theory.

Athens University of Economics and Business

January 2011

Master of Science @ Information Systems (Grade: 8.34/10 - Scholarship)

- Major Courses: Applied Cryptography, Computer and Network Security, Software development and Systems Architecture, Information Security and Critical Infrastructure Protection, Development of Information systems and large databases, Computer and Network Security.

University of Piraeus

July 2008

Bachelor of Science @ Department of Informatics (Grade: 7.01/10)

- Major Courses: Object-oriented programming, Computer design and architecture, Logical design of digital circuits, IT security, Networks.

Sponsored Research Projects

1. MEAITY – University of Piraeus

Feb. 2017 – August 2017

Senior Researcher

Development of methodologies and embedded security solutions for e-health services based on Internet of Things technologies. The scope of the project is the development of innovative methodologies and integrated security solutions for the protection of IoT technologies that used to provide / support real-time health services.

- **Responsibility:** Senior researcher of the project. Attack implementation and demo on process-aware attacks on medical devices.
- **Outcome:** Journal paper on analysis of IoT network protocols and their device usage. Conference paper (under peer review) on novel process-aware attacks on Type-I diabetic treatments using CGMS infusion pumps through malware.

2. Google Digital News Innovation (DNI) Fund – University of Piraeus Principal Investigator – R&D

Feb. 2017 – August 2017

“Word of Mouth” (WoM) is an *privacy-aware*, user-friendly software that will enable *fast and passive distribution of location-and-time-specific trending news* to interested users. The idea is to emulate the “mouth-to-mouth” spreading of news in a peer-to-peer manner, while at the same time fully respecting users’ location and information privacy.

- **Responsibility:** Director & lead researcher of the project. Method & algorithm development (Java), Business process analysis, Business Impact analysis, technology utilization and implementation.
- **Outcome:** Android mobile application able to passively distribute less-trending, location-and-time based news to interested users by utilizing user article searches and private proximity testing to ensure user privacy.

3. Athens University of Economics and Business DRASI 2 2017/18 - Principal Investigator

Dec. 2017 – Present

“Development of a risk-based interdependency analysis methodology capable to analyze large-scale traffic congestions of cargo ships between interconnected ports of the maritime network in the entire planet and provide mitigation solutions to increase traffic flow resilience. Proposed research held in cooperation with MarineTraffic Corporation”.

DRASI 2 2017/18 - Researcher

Project: “Protecting critical infrastructure networks from side channel attacks on packets”

“Despite encryption, targeted side channel attacks on encrypted packets may lead to information disclosure of functionality over encrypted TCP/IP running MODBUS RTU protocol. In this project, we presented attacks on web interfaces that implements unpadded encryption with specific block cipher modes (e.g. CFB, GCM, OFB and CTR modes) or most stream ciphers (e.g. RC4) to send MODBUS functions over TCP/IP is subject to differential packet size attacks. A major cause for this attack is the very small number of potential MODBUS commands and differences in packet sizes, which leads to distinctions in traffic”.

4. Athens University of Economics and Business DRASI 2 2016/17 - Principal Investigator

Oct. 2016 – Nov. 17

Risk mitigation strategy development and analysis of Cascading failures specifically for the Transportation Sector and critical infrastructures in general. Methods based on graph theory, centrality metric analysis and fuzzy logic.

- **Responsibility:** Director and lead researcher. Method & algorithm development (Java); Graph Theory analysis; Data analysis; Feature extraction; Tool implementation.
- **Outcome:** Methodology and tools able to analyze dependencies between roads and junctions in UK’s transportation sector and predict the most critical dependency paths and most dangerous infrastructure nodes in Risk Dependency Graphs. Tool development able to propose areas for congestion mitigation.

Selected Research Publications

Journals

- [J-22] Dedousis P., Stergiopoulos G., Arampatzis G. and Gritzalis D., A security-aware framework for designing industrial engineering processes, *IEEE ACCESS*, November 2021.
- [J-21] Xarhoulacos C.-G., Anagnostopoulou A., Stergiopoulos G., Gritzalis D., "Misinformation vs. situational awareness: The art of deception and the need for cross-domain detection", *Sensors (Special Issue: Cyber Situational Awareness)*, August 2021.
- [J-20] V. Malamas, F. Chantzis, T. K. Dasaklis, G. Stergiopoulos, P. Kotzanikolaou and C. Douligeris, "Risk Assessment Methodologies for the Internet of Medical Things: A Survey and Comparative Appraisal," in *IEEE Access*, vol. 9, pp. 40049-40075, 2021
- [J-19] Stergiopoulos G., Gritzalis D., Anagnostopoulou A., Vasilellis E., "Dropping malware through sound injection: A comparative analysis on Android operating systems", *Computers & Security*, February 2021.
- [J-18] G. Lykou, P. Dedousis, G. Stergiopoulos, D. Gritzalis, "Assessing Interdependencies and Congestion Delays in the Aviation Network", *IEEE Access*, 2020.
- [J-17] Gkotsis I., Gazi A., Gritzalis D., Stergiopoulos G., Limneos V., Vassiliou V., Koutiva E., Petrantonakis D., Lefkokilos E., Agrafioti E., Chalkidou A., Drakoulis D., Eleftheriou A., Skalidi A., Demestichas P., Fuggini C. (2020) Securing the European Gas Network, the Greek Business Case. Special Issue "Technology Advances and Support for Security Practitioners" of Security Informatics and Law Enforcement, Springer, ISSN: 2523-8507
- [J-16] Dedousis P., Stergiopoulos G., Gritzalis D., "An improved bit masking technique to enhance covert channel attacks in everyday IT systems", in *ICETE-2020*, Obaidat M., et al. (Eds.), Springer, 2021
- [J-15] Stergiopoulos G., Dedousis P., Gritzalis D. "Automatic analysis of attack graphs for risk mitigation and prioritization on large-scale and complex networks in Industry 4.0", *International Journal of Information Security*, Springer, 2020, <https://doi.org/10.1016/j.cose.2020.101869>
- [J-14] Dimitris Koutras, George Stergiopoulos, Thomas Dasaklis, Panayiotis Kotzanikolaou, Dimitrios Glynos, Christos Douligeris, "Security in IoMT Communications: A survey", *SENSORS Journal*, MDPI, 2020.
- [J-13] Stergiopoulos G., Gritzalis D., Limnaios E., "Cyber-attacks on the Oil & Gas sector: A survey on incident assessment and attack patterns", *IEEE Access*, 2020.
- [J-12] D Gritzalis, G Stergiopoulos, E Vasilellis, A Anagnostopoulou, "Readiness exercises: Are risk assessment methodologies ready for the Cloud?", *Learning and Analytics in Intelligent Systems*, Vol. 14, pp. 177-192, Springer, June 2020.
- [J-11] George Stergiopoulos, Panagiotis Dedousis, Dimitris Gritzalis, Automatic network restructuring and risk mitigation through business process asset dependency analysis, *Computers and Security (CoSe)*, Volume 96, 101869, ISSN 0167-4048, 2020.
- [J-10] Malamas V., Dasaklis T., Chantzis F., Stergiopoulos G., Kotzanikolaou P., Douligeris C., Risk Assessment Methodologies for the Internet of Medical Things: A Survey and Comparative Appraisal, *IEEE Access*, 2021.
- [J-9] Stergiopoulos G., Chronopoulou G., Bitsikas E., Tsalis N., Gritzalis D., "Using side channel TCP features for real-time detection of malware connections", In: *Journal of Computer Security*, Vol. 27, no. 5, pp. 507-520, 2019.
- [J-8] Stergiopoulos G., Kapetanias N., Vasilellis E., Gritzalis D., "Leaking SCADA commands over unpadded TCP/IP encryption through differential packet size analysis", *Security & Privacy*, April 2019.

- **[J-7]** Stergiopoulos, G., Valvis, E., Mitrodimas, D., Lekkas, D., & Gritzalis, D. (2018). Analyzing congestion interdependencies of ports and container ship routes in the maritime network infrastructure. In: *IEEE Access*, 6, 63823-63832.
- **[J-6]** Stergiopoulos, G., Gritzalis, D., & Kouktzoglou, V. (2018). Using formal distributions for threat likelihood estimation in cloud-enabled IT risk assessment. In *Computer Networks*, Elsevier, 134, 23-45.
- **[J-5]** Stergiopoulos, G., Valvis, E., Anagnou-Misyris, F., Bozovic, N., & Gritzalis, D. (2017). Interdependency analysis of junctions for congestion mitigation in transportation infrastructures. In *ACM SIGMETRICS Performance Evaluation Review*, 45(2), 119-124.
- **[J-4]** Stergiopoulos, G., Kouktzoglou, V., Theocharidou, M., & Gritzalis, D. (2017). A process-based dependency risk analysis methodology for critical infrastructures. In: *International Journal of Critical Infrastructures (Special Issue)*, 13(2/3), 184-205.
- **[J-3]** Stergiopoulos, G., Katsaros, P., & Gritzalis, D. (2017). Program analysis with risk-based classification of dynamic invariants for logical error detection. In: *Computers & Security (CoSe)*, Elsevier, 71, 36-50.
- **[J-2]** Stergiopoulos, G., Kotzanikolaou, P., Theocharidou, M., Lykou, G., & Gritzalis, D. (2016). Time-based critical infrastructure dependency analysis for large-scale and cross-sectoral failures. In: *International Journal of Critical Infrastructure Protection*, Elsevier, 12, 46-60.
- **[J-1]** Stergiopoulos, G., Kotzanikolaou, P., Theocharidou, M., & Gritzalis, D. (2015). Risk mitigation strategies for critical infrastructures based on graph centrality analysis. In: *International Journal of Critical Infrastructure Protection*, Elsevier, 10, 34-44.

Conferences

- **[C-21]** Konstantinou, C., Stergiopoulos, G., Parvania, M., & Esteves-Verissimo, P. (2021). Chaos engineering for enhanced resilience of cyber-physical systems. Resilience Week (RWS) 2021, INL Idaho National Laboratory, Washington D.C., October 2021.
- **[C-20]** Dedousis P., Stergiopoulos G., Gritzalis D., "Towards integrating security in industrial engineering design practices", in *Proc. of the 18th International Conference on Security & Cryptography (SECRYPT-2021)*, July 2021.
- **[C-19]** K. Nomikos, A. Papadimitriou, G. Stergiopoulos, D. Koutras, M. Psarakis and P. Kotzanikolaou, "On a Security-oriented Design Framework for Medical IoT Devices: The Hardware Security Perspective," 2020 23rd Euromicro Conference on Digital System Design (DSD), Kranj, Slovenia, 2020, pp. 301-308, doi: 10.1109/DSD51259.2020.00056.
- **[C-18]** Stergiopoulos G., Lygerou E., Tsalis N., Tomaras D., Gritzalis D., Avoiding network and host detection using packet bit-masking, In *Proc. of the 17th International Conference Security and Cryptography (SECRYPT-2020)*, ICETE, 2020.
- **[C-17]** Lykou, G., Anagnostopoulou, A., Stergiopoulos, G., & Gritzalis, D. (2018, September). Cybersecurity Self-assessment Tools: Evaluating the Importance for Securing Industrial Control Systems in Critical Infrastructures. In *International Conference on Critical Information Infrastructures Security (CRITIS 2018)*, pp. 129-142. Springer, Cham.
- **[C-16]** G. Stergiopoulos, A. Talavari, E. Bitsikas, D. Gritzalis, "Automatic detection of multiple types of malicious traffic using timing attacks and differential size analysis", in *Proc. of the 23rd European Symposium on Research in Computer Security (ESORICS-2018)*, Springer, Spain, September 2018.

- [C-15] Tsalis, N., Stergiopoulos, G., Bitsikas, E., Gritzalis, D., & Apostolopoulos, T. K. (2018). Side Channel Attacks over Encrypted TCP/IP Modbus Reveal Functionality Leaks. In: *Proc. of the 15th International Conference Security and Cryptography (SECRYPT-2018)*, ICETE (2) (pp. 219-229).
- [C-14] Stergiopoulos G., Valvis E., Anagnou-Misyris F., Bozovic N., Gritzalis D., "Interdependency analysis of junctions for congestion mitigation in Transportation Infrastructures", In *1st ACM SIGMETRICS International Workshop on Critical Infrastructure Network Security (CINS-2017)*, USA, June 2017.
- [C-13] Lykou G., Stergiopoulos G., Papachrysanthou A., Gritzalis D., "Climate adaption: Addressing risks and impacts of climate change on Transport Sector", In *11th International Conference on Critical Infrastructure Protection (IFIP WG 11.0 2017)*, USA, March 2017.
- [C-12] Gritzalis, D., Stergiopoulos, G., Kotzanikolaou, P., Magkos, E., & Lykou, G. (2016, September). Critical infrastructure protection: a holistic methodology for Greece. In *International Workshop on the Security of Industrial Control Systems and Cyber-Physical Systems* (pp. 19-34). Springer, Cham.
- [C-11] Stergiopoulos G, Katsaros P., Gritzalis D., Apostolopoulos T., "Combining invariant violation with execution path classification for detecting multiple types of logical errors and race conditions", in *Proc. of the 13th International Conference on Security & Cryptography (SECRYPT-2016)*, ICETE, Vol. 4, pp. 28-40, Portugal, July 2016.
- [C-10] Stergiopoulos G., Vasilellis E., Lykou G., Kotzanikolaou P., Gritzalis D., "Critical Infrastructure Protection tools: Classification and comparison", in *Proc. of the 10th International Conference on Critical Infrastructure Protection (IFIP WG 11.10 2016)*, USA, March 2016
- [C-9] Faily S., Stergiopoulos G., Katos V., Gritzalis D., "Water, water, everywhere: Nuances for a Water Industry Critical Infrastructure specification exemplar", in *Proc. of the 10th International Conference on Critical Infrastructures Security (CRITIS-2015)*, pp. 243-246, Springer (LNCS 9578), Germany, October 2015.
- [C-8] Stergiopoulos G., Theoharidou M., Gritzalis D., "Using logical error detection in Remote-Terminal Units to predict initiating events of Critical Infrastructures failures", in *Proc. of the 3rd International Conference on Human Aspects of Information Security, Privacy and Trust (HCI-2015)*, pp. 672-683, Springer (LNCS 9190), USA, August 2015.
- [C-7] Stergiopoulos G., Petsanas P., Katsaros P., Gritzalis D., "Automated exploit detection using path profiling: The disposition should matter, not the position", in *Proc. of the 12th International Conference on Security and Cryptography (SECRYPT-2015)*, pp. 100-111, ICETE, France, July 2015.
- [C-6] Stergiopoulos G., Kotzanikolaou P., Theoharidou M., Gritzalis D., "Using centrality metrics in CI dependency risk graphs for efficient risk mitigation", in *Proc. of the 9th IFIP International Conference on Critical Infrastructure Protection (IFIP WG 11.0 2015)*, Springer, USA, March 2015.
- [C-5] Stergiopoulos, G., Katsaros, P., & Gritzalis, D. Automated detection of logical errors in programs. In *International Conference on Risks and Security of Internet and Systems* (pp. 35-51). Springer, Cham, August 2014.
- [C-4] Gritzalis, D., Stavrou, V., Kandias, M., & Stergiopoulos, G.. Insider threat: enhancing BPM through social media. In *2014 6th International Conference on New Technologies, Mobility and Security (NTMS)* (pp. 1-6). IEEE, March 2014.
- [C-3] Stergiopoulos, George, Miltiadis Kandias, and Dimitris Gritzalis. "Approaching encryption through complex number logarithms." In *2013 International Conference on Security and Cryptography (SECRYPT)*, pp. 1-6. IEEE, 2013.

- [C-2] Stergiopoulos, G., Tsoumas, B., & Gritzalis, D.. On business logic vulnerabilities hunting: the APP_LogGIC framework. In *International Conference on Network and System Security* (pp. 236-249). Springer, Berlin, Heidelberg, June 2013.
- [C-1] Stergiopoulos, G., Tsoumas, B., & Gritzalis, D. Hunting application-level logical errors. In *International Symposium on Engineering Secure Software and Systems* (pp. 135-142). Springer, Berlin, Heidelberg, February 2012.

Book Chapters and other publications

- G. Stergiopoulos, *Power Sector Dependency on Time Service: Attacks against time sensitive services*, European Union Agency for Cybersecurity (ENISA), April 2020.
- Stergiopoulos, G., Katsaros, P., & Gritzalis, D. (2014, July). Source code profiling and classification for automated detection of logical errors. In *3rd International Seminar on Program Verification, Automated Debugging and Symbolic Computation*, Germany.
- Προσκεκλημένος ομιλητής στο συνέδριο ICT Security World 2017, για διάλεξη με θέμα “WORD-OF-MOUTH: Private Gossiping of Geolocation News”, Ιούνιος 2017.
- Stergiopoulos G., Mentzelioti D., "Security in the Internet of Things: A primer", 3rd ICT Security Forum, Athens, Greece, June 2017.
- Stergiopoulos G., Gritzalis D., "Critical Infrastructure: The Nervous System of any Welfare State", 4th Information Security Conference, Athens, February 2017.
- Stergiopoulos G., Kotzanikolaou P., Theocharidou M., Gritzalis D., "Risk Mitigation for Critical Infrastructures: AUEB INFOSEC Lab Initiatives", Risk-Tea Workshop, Athens, January 2017.
- Stergiopoulos G., Gritzalis D., “Critical Infrastructure Protection: A Policy Proposal and Action Plan for Greece”, NATO 1st NMOTC Cyber Security Conference, Greece, October 2016.
- Stergiopoulos G., "Critical infrastructure interdependencies: The nervous system of a technologically developed country and how to protect it", 4th International e-Life Congress (eLife-2015), Athens, November 2015.
- Stergiopoulos G., Kotzanikolaou P., Theocharidou M., Gritzalis D., "Topics and Research Initiatives in Risk Mitigation for Critical Infrastructures", *19th Panhellenic Conference on Informatics (PCI-2015)*, Workshop on Security in Critical Information Infrastructures, October 2015.
- Gritzalis D., Theocharidou M., Stergiopoulos G. (Editors), *Critical Infrastructure Security and Resilience: Theories, Methods, Tools and Technologies*, Springer, January 2019.
- Stergiopoulos G., Katsaros P., Gritzalis D., "Execution path classification for vulnerability analysis and detection", in *E-Business and Telecommunications*, Obaidat M., et al. (Eds.), pp. 293-317, Springer (CCIS 585), 2016.
- Stergiopoulos G., Gritzalis D., Kotzanikolaou P., Magkos M., Lykou G., "Holistic Protection of Critical Infrastructures", *Maritime Interdiction Operations Journal*, Vol. 14, No. 1, pp. 29-41, 2017.
- Stergiopoulos G., Vasilellis E., Lykou G., Kotzanikolaou P., Gritzalis D., “Critical Infrastructure Protection tools: Classification and comparison”, in *Critical Infrastructure Protection X*, Sheno S. (Ed.), Springer, 2016.
- Stergiopoulos G., Theocharidou M., Kotzanikolaou P., Gritzalis D., "Using centrality measures in dependency risk graphs for efficient risk mitigation", in *Critical Infrastructure Protection IX*, Sheno S. (Ed.), pp. 25-40, Springer, 2015.

Professional Academic Service

Athens University of Economics and Business

Adjunct Lecturer

September 2016 - Present

Module Leader in courses:

- Information Systems Security (B.Sc., Athens University of Economics and Business)
- Cryptography and Practical Uses (M.Sc., Athens University of Economics and Business)

University of Piraeus

Adjunct Lecturer

February 2016 - Present

Module Leader in courses:

- Security in Cryptographic Protocols (M.Sc., University of Piraeus)

University of Derby

Adjunct Lecturer

February 2016 – February 2017

Collaborative Partner: Mediterranean College, Greece

- Module Leader in courses:
- Ethical Hacking,
- Distributed Networks,
- Project Management,
- Networks and Security.

Editor – Co-editor

Gritzalis D., Theocharidou M., Stergiopoulos G. (Editors), Critical Infrastructure Security and Resilience: Theories, Methods, Tools and Technologies, Springer, January 2019.

Technical Referee

- IBM Journal of Research and Development
- European Symposium on Research in Computer Security (ESORICS)
- Elsevier, International Journal of Critical Infrastructure Protection (IJCIP)
- Elsevier, Computers and Security, Elsevier (COSE)
- Critical Infrastructure Protection (IFIP)

Session Chair

- International Conference on Security and Cryptography (SECRYPT 2016), Lisbon, Portugal

Tutoring – Teaching

December 2011- Present

- Adjunct Lecturer University of Piraeus, Athens, Greece
- Lecturer University of East London, Metropolitan College
- Lecturer University of Derby, Mediterranean College
- Teaching and laboratory experience on the following academic areas:
 - IT Security
 - Network Security and Penetration Testing
 - Audio Steganography – Security in sound
 - Java programming
 - Data Structures
 - Logical Programming

Book Review articles

- T. Klein, "A Bug Hunter's Diary", In Computers and Security, Vol. 43.
- P. Polstra, "Hacking and Penetration Testing with Low Power Devices", Computers and Security, Vol. 49.

Awards and Certificates

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- | | |
|--|------|
| • Scholarship, M.Sc. in Information Systems, Athens University of Economics and Business | 2011 |
| • Excellence, M.Sc. in Information Systems, Athens University of Economics and Business | 2011 |
| • TOEFL degree, Score 114/120 | 2008 |
| • Cambridge English: Proficiency (CPE) qualification | 2000 |

Skills

-
- **Languages:** English (Excellent), French (Basic/Average), Greek (Native)
 - Proficient in various risk assessment methodologies and relevant tools (NIST 800-30, ISO 27005, Pilar/Magerit, CRAMM, Octave etc.)
 - Proficient in on-site cyber-physical risk assessment of Information Infrastructures.
 - Proficient in various security tools, e.g. Metasploit Framework, Kali Linux, Burp, NESSUS, Netsparker, IDA Pro, WEKA data mining tool, Java Compiler AST programming etc.
 - Proficient in programming languages and libraries: Java, C++, Neo4J, Python, Linux, Windows API.
 - Proficient in source code development (Java, Python, C++).