Panagiotis Ilia

Lecturer (tenure track)

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Research Interests

Web Security and Privacy; Mobile Security; Online Tracking; Fingerprinting; Authentication; Access Control; Online Social Networks; Anomaly Detection and Behavioral Analysis; Vulnerability Discovery; Security of and with Generative and Agentic Al.

Education

2014 – 2018 Ph.D. in Computer Science

University of Crete, Greece.

Thesis: Privacy Loss in Online Social Networks due to Access Control and Data Management

Policies. Advisor: Prof. Sotiris Ioannidis

2011 – 2012 M.Sc. in Advanced Computing - Internet Technologies with Security

University of Bristol, United Kingdom.

Thesis: Cryptographic Key Exchange in IPv6-based, Low Power, Lossy, Networks (6LowPAN).

Advisor: Prof. Theo Tryfonas

2006 - 2010 B.Sc. in Computer Science

Aristotle University of Thessaloniki, Greece.

Thesis: Orthogonal Frequency Division Multiplexing (OFDM) optical systems for high-bit rate transmission. Advisor: Prof. Nikos Pleros

Experience

- Jan 24 Present Lecturer Department of Electrical Engineering, Computer Science and Engineering, Cyprus University of Technology (CUT), Cyprus.
- Mar 22 Dec 23 **Recognised Researcher/Project Manager** *Telecommunication Systems Research Institute (T.S.I.) Technical University of Crete (TUC)*, Greece.
- Jan 19 Jan 22 **Postdoctoral Researcher** Department of Computer Science, University of Illinois at Chicago, USA.
- Jun 13 Dec 18 **Research Assistant** Distributed Computing Systems Lab, Institute of Computer Science, Foundation for Research and Technology Hellas (FORTH), Greece.
- Nov 16 Apr 17 **Visiting Research Scholar** *Computer Science Department, Stony Brook University*, NY, USA.

- Sep 15 Dec 15 **Visiting Research Scholar** Laboratory of Internet Computing (LINC), Department of Computer Science, University of Cyprus, Lefkosia, Cyprus.
- Jun 14 Sep 14 **Visiting Research Scholar** *StrictSociaLab, Department of Theoretical and Applied Science, University of Insubria*, Varese, Italy.

Honors and Awards

- November 2021 Finalist in 2021 CSAW Applied Research Competition
 - February 2021 Distinguished Paper Award NDSS 2021
 - June 2018 Selected for Participation in Google's Web Security Summit 2018
- Oct 16 Dec 18 **Research Scholarship** (graduate)
 Institute of Computer Science, Foundation for Research and Technology Hellas
- Jun 13 Sep 16 **Early Stage Research Fellowship**Marie Curie ITN project iSocial

Vulnerability Rewards

CVE-2020-6473: Insufficient policy enforcement in Blink Rewards from Google and Facebook

CVE-2020-6521: Side-channel information leakage in autofill Reward from Google

CVE-2021-21181: Side-channel information leakage in autofill Reward from Google

Teaching

- Fall 2025 **CSE423 Introduction to Cryptography and Computer Security** *Cyprus University of Technology.*
- Spring 2025 **CEI227 Advanced Object Oriented Methodology and Programming (UML, Java)** *Cyprus University of Technology.*
- Spring 2025 CEI529 Web Security and Privacy Cyprus University of Technology.
 - Fall 2024 **CEI423 Introduction to Cryptography and Computer Security** *Cyprus University of Technology.*
- Spring 2024 CEI227 Advanced Object Oriented Methodology and Programming (UML, Java) Cyprus University of Technology.

Spring 2024 CEI529 - Web Security and Privacy Cyprus University of Technology.

Teaching Assistance

Spring 2018 CS 457 - Introduction to Information Security Systems, University of Crete.

Instructor: Prof. Evangelos P. Markatos

Fall 2017 CS 150 - Programming, University of Crete.

Instructor: Prof. Xenophon Zabulis

Spring 2016 CS 558 - Internet Systems and Technologies, University of Crete.

Instructor: Prof. Evangelos P. Markatos

Spring 2015 CS 459 - Internet Measurements, University of Crete.

Instructor: Prof. Evangelos P. Markatos

Fall 2014 CS 345 - Operating Systems, University of Crete.

Instructor: Prof. Evangelos P. Markatos

Spring 2014 CS 558 - Internet Systems and Technologies, University of Crete.

Instructor: Prof. Evangelos P. Markatos

Students

Student Advising

2025 - present Christos Zavos (BSc, Cyprus Univ. of Technology)

2025 - present Simos Pilatsis (BSc, Cyprus Univ. of Technology)

2025 - present Kyriacos Andreou (BSc, Cyprus Univ. of Technology)

2025 - present Gabriel Simon (BSc, Cyprus Univ. of Technology)

2025 - present Andria Philippidou (BSc, Cyprus Univ. of Technology)

2025 - present Christos Matthaiou (MSc, Cyprus Univ. of Technology)

2025 - present Charalambos Michailidis (MSc, Cyprus Univ. of Technology)

2025 - present Konstantinos Konstantinou (MSc, Cyprus Univ. of Technology)

2024 - present Mamas Vartholomaiou (MSc, Cyprus Univ. of Technology)

2024 - 2025 Andreas Agisilaou (BSc, Cyprus Univ. of Technology)

2024 - 2025 Stylianos Kyriakou (BSc, Cyprus Univ. of Technology)

2024 - present Kyriakos Evmenios Nomikos (BSc, MSc, Cyprus Univ. of Technology)

2024 - 2025 Leonidas Kotidis (BSc, Cyprus Univ. of Technology)

2024 - 2025 Konstantinos Ioannou (BSc, Cyprus Univ. of Technology)

Student Mentoring

2023 - present Konstantinos Spyridakis (PhD, Tech. Univ. of Crete)

2022 - 2024 Stavros Lyronis (MSc, Tech. Univ. of Crete)

2022 - present Argyris Papadopoulos (MSc, Tech. Univ. of Crete)

- 2022 2024 Ioannis Arkalakis (MSc, Tech. Univ. of Crete)
- 2022 2024 Panagiotis Leontis (BSc, Tech. Univ. of Crete)
- 2022 2024 Panagiotis Savvaidis (BSc, Tech. Univ. of Crete)
- 2022 2023 Despoina Ntolka (BSc, Tech. Univ. of Crete)
- 2019 2022 Soroush Karami (PhD, Univ. of Illinois at Chicago)
- 2019 2022 Saumya Solanki (PhD, Univ. of Illinois at Chicago)
- 2019 2022 Xu Lin (PhD, Univ. of Illinois at Chicago)
- 2017 2022 Konstantinos Solomos (MSc, Univ. of Crete & PhD, Univ. of Illinois at Chicago)
 - 2018 Grégoire Menguy (MSc, Telecom SudParis)
- 2016 2018 Konstantinos Drakonakis (MSc & PhD, Univ. of Crete)
- 2016 2018 Michalis Diamantaris (MSc & PhD, Univ. of Crete)
- 2016 2017 Giorgos Tsakountakis (BSc, Univ. of Crete)
- 2016 2017 Michalis Pachilakis (MSc, Univ. of Crete)
- 2015 2017 Giorgos Tsirantonakis (MSc, Univ. of Crete)

Service

Organising Committee Member

IOSEC Workshop on Information and Operational Technology Security, 2024

Program Committee Member

- FedCSIS Conference on Computer Science and Intelligence Systems, 2025.
 - CCS ACM Conference on Computer and Communications Security, 2024.
 - WWW The Web Conference, 2024, 2025, 2026.
 - ISC Information Security Conference, 2023, 2024, 2025.
- SecWeb Security for the Web, 2024.
 - EICC European Interdisciplinary Cybersecurity Conference, 2024.
 - AINA International Conference on Advanced Information Networking and Applications, 2024
 - ICDCS International Conference on Distributed Computing Systems, 2023.
 - CANS International Conference on Cryptology and Network Security, 2022, 2023.
- EuroSec European Workshop on Systems Security, 2022, 2023, 2024.
- CODASPY Conference on Data and Applications Security and Privacy, 2020, 2021, 2022, 2023.

Reviewer

- COMP Journal Computing, 2018.
- TOPS Transactions on Privacy and Security, 2017.
- SNAM Social Network Analysis and Mining, 2017.
- IET IS IET Information Security, 2014, 2017.
 - TDSC IEEE Transactions on Dependable and Secure Computing, 2015, 2016.
 - IJIS International Journal of Information Security, 2015, 2016.

External Reviewer/Subreviewer

- SEC USENIX Security Symposium, 2020, 2021.
- CCS ACM Conference on Computer and Communications Security, 2021.
- S&P IEEE Symposium on Security and Privacy, 2015, 2022.
- WWW The Web Conference, 2018, 2019, 2020.
- RAID Research in Attacks, Intrusions and Defenses, 2015, 2017, 2020.
- DIMVA Detection of Intrusions and Malware & Vulnerability Assessment, 2017.
- ASONAM Advances in Social Networks Analysis and Mining, 2017.
- CODASPY Conference on Data and Applications Security and Privacy, 2016, 2017.
- ASIACCS ACM Asia Conference on Computer and Communications Security, 2017.
 - CCSW Cloud Computing Security Workshop, 2016.
 - PAM Passive and Active Measurements, 2016.
 - QASA Quantitative Aspects of Security Assurance, 2016.
 - STM Security and Trust Management, 2016.
 - ACNS Applied Cryptography and Network Security, 2016.
 - ARES Availability, Reliability and Security, 2016.
 - CCNC IEEE Consumer Communications and Networking Conference, 2016
- CloudSPD Cloud Security and Data Privacy by Design, 2015
- ESORICS European Symposium on Research in Computer Security, 2015, 2017.
 - IMC ACM Internet Measurement Conference, 2015.
 - eCrime APWG Symposium on Electronic Crime Research, 2014.
 - TRUST Trust & Trustworthy Computing, 2014.

Publications

Conference Proceedings

- [C.1] Ioannis Arkalakis, Michalis Diamantaris, Serafeim Moustakas, Sotiris Ioannidis, Jason Polakis, and Panagiotis Ilia. Abandon All Hope Ye Who Enter Here: A Dynamic, Longitudinal Investigation of Android's Data Safety Section. In Proceedings of the 33rd USENIX Security Symposium, August 2024, Philadelphia, USA.
- [C.2] Konstantinos Solomos, Panagiotis Ilia, Nick Nikiforakis, and Jason Polakis. Escaping the Confines of Time: Continuous Browser Extension Fingerprinting Through Ephemeral Modifications. In Proceedings of the 2022 ACM SIGSAC Conference on Computer and Communications Security (CCS), November 2022, Los Angeles, USA.
- [C.3] Konstantinos Solomos, Panagiotis Ilia, Soroush Karami, Nick Nikiforakis, and Jason Polakis. The Dangers of Human Touch: Fingerprinting Browser Extensions through User Actions. In *Proceedings of the 31st USENIX Security Symposium*, August 2022, Boston, USA.
- [C.4] Xu Lin, Panagiotis Ilia, Saumya Solanki, and Jason Polakis. Phish in Sheep's Clothing: Exploring the Authentication Pitfalls of Browser Fingerprinting. In *Proceedings of the* 31st USENIX Security Symposium, August 2022, Boston, USA.

- [C.5] Soroush Karami, Faezeh Kalantari, Mehrnoosh Zaeifi, Xavier J. Maso, Erik Trickel, Panagiotis Ilia, Yan Shoshitaishvili, Adam Doupé, and Jason Polakis. Unleash the Simulacrum: Shifting Browser Realities for Robust Extension-Fingerprinting Prevention. In *Proceedings of the 31st USENIX Security Symposium*, August 2022, Boston, USA.
- [C.6] Quan Chen, Panagiotis Ilia, Michalis Polychronakis, and Alexandros Kapravelos. Cookie Swap Party: Abusing First-Party Cookies for Web Tracking. In *Proceedings* of The Web Conference (WWW), April 2021, Virtual.
- [C.7] Soroush Karami, Panagiotis Ilia, and Jason Polakis. Awakening the Web's Sleeper Agents: Misusing Service Workers for Privacy Leakage. In Proceedings of the Network and Distributed System Security Symposium (NDSS), February 2021, Virtual. (Distinguished Paper Award)
- [C.8] Xu Lin, Panagiotis Ilia, and Jason Polakis. Fill in the Blanks: Empirical Analysis of the Privacy Threats of Browser Form Autofill. In Proceedings of the ACM Conference on Computer and Communications Security (CCS), November 2020, Virtual. (Finalist in 2021 CSAW Applied Research Competition)
- [C.9] Konstantinos Solomos, Panagiotis Ilia, Sotiris Ioannidis, and Nicolas Kourtellis. Clash of the Trackers: Measuring the Evolution of the Online Tracking Ecosystem. In Proceedings of the Network Traffic Measurement and Analysis Conference (TMA), June 2020, Berlin, Germany.
- [C.10] Soroush Karami, Panagiotis Ilia, Konstantinos Solomos, and Jason Polakis. Carnus: Exploring the Privacy Threats of Browser Extension Fingerprinting. In *Proceedings of the Network and Distributed System Security Symposium (NDSS)*, February 2020, San Diego, USA.
- [C.11] Konstantinos Solomos, Panagiotis Ilia, Sotiris Ioannidis, and Nicolas Kourtellis. TALON: An Automated Framework for Cross-Device Tracking Detection. In Proceedings of the 22nd International Symposium on Research in Attacks, Intrusions and Defenses (RAID), September 2019, Beijing, China.
- [C.12] Panagiotis Papadopoulos, Panagiotis Ilia, and Evangelos P. Markatos. Truth in Web Mining: Measuring the Profitability and the Imposed Overheads of Cryptojacking. In Proceedings of the 22nd International Conference on Information Security (ISC), September 2019, New York City, USA.
- [C.13] Kostas Drakonakis, Panagiotis Ilia, Sotiris Ioannidis, and Jason Polakis. Please Forget Where I Was Last Summer: The Privacy Risks of Public Location (Meta)Data. In Proceedings of the Network and Distributed System Security Symposium (NDSS), February 2019, San Diego, USA.
- [C.14] Panagiotis Papadopoulos, Panagiotis Ilia, Michalis Polychronakis Evangelos P. Markatos, Sotiris Ioannidis, and Giorgos Vasiliadis. Master of Web Puppets: Abusing Web Browsers for Persistent and Stealthy Computation. In Proceedings of the Network and Distributed System Security Symposium (NDSS), February 2019, San Diego, USA.

- [C.15] Giorgos Tsirantonakis, Panagiotis Ilia, Sotiris Ioannidis, Elias Athanasopoulos, and Michalis Polychronakis. A Large-scale Analysis of Content Modification by Open HTTP Proxies. In *Proceedings of the Network and Distributed System Security Symposium (NDSS)*, February 2018, San Diego, USA.
- [C.16] Antonios A. Chariton, Eirini Degkleri, Panagiotis Papadopoulos, Panagiotis Ilia, and Evangelos P. Markatos. CCSP: a Compressed Certificate Status Protocol. In Proceedings of the 36th IEEE International Conference on Computer Communications (INFOCOM), May 2017, Atlanta, USA.
- [C.17] Panagiotis Ilia, Barbara Carminati, Elena. Ferrari, Paraskevi Fragopoulou, and Sotiris Ioannidis. SAMPAC: Socially-Aware collaborative Multi-Party Access Control. In Proceedings of the 7th ACM Conference on Data and Application Security and Privacy (CODASPY), March 2017, Scottsdale, USA.
- [C.18] Panagiotis Ilia, Iasonas Polakis, Elias Athanasopoulos, Federico Maggi, and Sotiris Ioannidis. Face/Off: Preventing Privacy Leakage From Photos in Social Networks. In Proceedings of the 22nd ACM SIGSAC Conference on Computer and Communications Security (CCS), October 2015, Denver, USA.
- [C.19] Iasonas Polakis, Panagiotis Ilia, Federico Maggi, Marco Lancini, Georgios Kontaxis, Stefano Zanero, Sotiris Ioannidis, and Angelos D. Keromytis. Faces in the Distorting Mirror: Revisiting Photo-based Social Authentication. In Proceedings of the 2014 ACM SIGSAC Conference on Computer and Communications Security (CCS), November 2014, Scottsdale, USA.

Workshop Proceedings

- [W.1] Konstantinos Solomos, Panagiotis Ilia, Sotiris Ioannidis, and Nicolas Kourtellis. Automated Measurements of Cross-Device Tracking. In Proceedings of the First International Workshop on Information and Operational Technology Security Systems (IOSec), co-located with the 21st International Symposium on Research in Attacks, Intrusions and Defenses (RAID), September 2018, Heraklion, Greece.
- [W.2] Antonios A. Chariton, Eirini Degkleri, Panagiotis Papadopoulos, **Panagiotis Ilia**, and Evangelos P. Markatos. DCSP: Performant Certificate Revocation, a DNS-based approach. In *Proceedings of the 9th European Workshop on System Security (EuroSec), co-located with the Eleventh European Conference on Computer Systems (EuroSys)*, April 2016, London, UK.
- [W.3] Iasonas Polakis, Panagiotis Ilia, Zacharias Tzermias, Sotiris Ioannidis, and Paraskevi Fragopoulou. Social Forensics: Searching for Needles in Digital Haystacks. In Proceedings of the 4th International Workshop on Building Analysis Datasets and Gathering Experience Returns for Security (BADGERS), co-located with the 18th International Symposium on Research in Attacks, Intrusions and Defenses (RAID), November 2015, Kyoto, Japan.
- [W.4] Panagiotis Ilia, George Oikonomou, and Theo Tryfonas. Cryptographic Key Exchange in IPv6-Based Low Power, Lossy Networks. In Proceedings of the 7th Workshop in Information Security Theory and Practice (WISTP), May 2013, Heraklion, Greece.

Journal Proceedings

[J.1] Michalis Pachilakis, Antonios A. Chariton, Panagiotis Papadopoulos, Panagiotis Ilia, Eirini Degkleri, and Evangelos P Markatos. Design and Implementation of a Compressed Certificate Status Protocol. ACM Transactions on Internet Technology (TOIT), vol. 0, January 2020.