Costas Iordanou

Education

PhD. (-Dr. -Ing.) Technical University of Berlin (TU Berlin), Germany. Thesis title: Crowdsourcing as a Guardian of Transparency, Privacy, and Anti-discrimination in a Personalized Web (With distinction - Awarded February 2019).

PhD. Candidate at Telematic Engineering, School of Engineering and Basic Sciences, Universidad Carlos III de Madrid, 2015 - 10/2018.

MSc. Telematic Engineering, School of Engineering and Basic Sciences, Universidad Carlos III de Madrid, 2015.

MSc. Electrical Engineering, Computer Engineering and Informatics, Cyprus University of Technology, 2014. (score:9.5/10)

BSc. Electrical Engineering, Computer Engineering and Informatics, Cyprus University of Technology, 2013. (score:8.51/10)

Appointments

Assistant Professor, Computer Engineering/Networking System at European University Cyprus, 10/2023 - present

Postdoc researcher at Cyprus University of Technology - Network Systems and Science Research Laboratory (NetSySci), Cyprus, 1/2020 - 9/2023

Postdoc researcher at Max Planck Institute for Informatics, Germany 3/2019 - 9/2019.

Researcher at Technical University of Berlin, Germany 2/2018 - 12/2018.

Early stage researcher at Telefonica Research Barcelona, Spain 8/2014 - 12/2017.

Honors and Awards

Distinguished paper award - ACM Internet Measurements Conference (IMC), 2018.

Public policy blog from Telefonica Spain related to the eyeWnder tool, March 2017. `https://www.telefonica.com/en/web/public-policy/blog/article/-/blogs/-why-am-i-seeing-this-ad-eyewnder-knows-it`

Marie Curie ITN METRICS program - Telefonica Research (Barcelona, Spain). 10/2014 - 10/2017.

A documentary in the Spanish TV Televisio 3 (Catalonia) featuring $heriff tool, July 1, 2017. `http://www.ccma.cat/tv3/generacio-digital/`

A documentary in the Swiss national TV (RTS un) about private data and transparency featuring $heriff tool, May 10, 2016. `https://www.rts.ch/play/tv/a-bon-entendeur/video/le-laboratoire-de-barcelone-dtl-telefonica-tente-de-rendre-plus-transparent-le-marche-des-donnees?id=7713273`

I-COM Data Science Hackathon, scientist level winner, Madrid - 2016.

Full scholarship from the Cyprus University of Technology for a Master degree, 2014.

Additional scholarship from the Department of Electrical Engineering, Computer Engineering and Informatics, Cyprus University of Technology for a Master degree, 2014.

Second best score award from Department of Electrical Engineering, Computer Engineering and Informatics, Cyprus University of Technology, 2013.

Research Interests

Networks and Systems; Federated Learning; Distributed AI/ML; Applied Machine Learning; Online privacy; Cybersecurity; Online price discrimination; Privacy preserving tracking techniques; Web tracking detection, prevention and monitoring; Cybersafety and fake news detection; Characterization and suppression of false information on the web.

List of Publications

Bibliometrics: 349 citations, h-index: 10, i10-index: 10

Journals and Proceedings

1. E.S. Papaefthymiou, **C. Iordanou**, F. Papadopoulos. "Fundamental Dynamics of Popularity-Similarity Trajectories in Real Networks", *Phys. Rev. Lett. 132 (25), 6*, 2024.

2. F. Frati, G. Darau, N. Salamanos, P. Leonidou, **C. Iordanou**, D. Plachouris, E. Syrmas, E. Floros, G. Nikitakis, G. Spanoudakis, K. Kalais, S. Tsichlaki, E. Damiani, G. C Kagadis, J. Najar, M. Sirivianos. "Cybersecurity training and healthcare: the AERAS approach", *International Journal of Information Security*, 2024.

3. Salamanos N., JensenMJ., **Iordanou C.**, Sirivianos M., "Did state-sponsored trolls shape the 2016 US Presidential Election discourse? Quantifying influence on Twitter". *International Symposium on Security and Privacy in Social Networks and Big Data*, 2023.

4. SA Azcoitia, **C Iordanou**, N Laoutaris, "Understanding the Price of Data in Commercial Data Marketplaces". *IEEE 39th International Conference on Data Engineering (ICDE)*, 2023.

5. Chu, T., Garcia-Recuero, A., **Iordanou, C.**, Smaragdakis, G., Laoutaris N. "Securing Federated Sensitive Topic Classification against Poisoning Attacks". *The Network and Distributed System Security (NDSS) Symposium*, 2023.

6. Paraschiv, M., Salamanos, N., **Iordanou, C.**., Laoutaris, N., Sirivianos, M. "A Unified Graph-Based Approach to Disinformation Detection using Contextual and Semantic Relations". *International AAAI Conference on Web and Social Media (ICWSM)*, Atlanta, GA, USA, 2022.

7. **C Iordanou**, F Papadopoulos, "Topology and Geometry of the Third-Party Domains Ecosystem: Measurement and Applications". ACM SIGCOMM Computer Communication Review 52 (4), 2022, 12-25.

8. SA Azcoitia, **C Iordanou**, N Laoutaris, "Measuring the price of data in commercial data marketplaces". *Proceedings of the 1st International Workshop on Data Economy*, 2022, 1-7.

9. Götze, M., Matic, S., **Iordanou, C.**, Smaragdakis, G., Laoutaris, N. "Measuring Web Cookies in Governmental Websites". *Web Science Conference (WebSci'22)*, Barcelona, Spain, 2022.

10. Gonzalez, R., Soriente, C., Carrascosa, J., M., Garcia-Duran, A., **Iordanou C.**, Niepert, M. "User Profiling as a Network Observer". *International Conference on emerging Networking EXperiments and Technologies (CoNEXT'21)*, ACM, Munich, Germany, 2021.

11. Leiva, L., Arapakis, I., **Iordanou, C.** "My Mouse, My Rules: Preventing Online User Profiling via Mouse Cursor Tracking". *In Proc. of ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR'21)*, 2021.

12. Matic, S., **Iordanou, C.**, Smaragdakis, G. and Laoutaris, N. "Identifying Sensitive URLs at Web-Scale". *In Proc. of the Internet Measurement Conference (IMC'20)*. ACM, New York, NY, USA, 619–633, 2020.

13. **Iordanou, C.**, Kourtellis, N., Carrascosa, J., Soriente, C., Cuevas, R. and Laoutaris, N. "Beyond content analysis: detecting targeted ads via distributed counting". *In Proc. of the 15th International Conference on Emerging Networking Experiments And Technologies (CoNext'19)*. ACM, Orlando, Florida, USA, 110-122, 2019.

14. **Iordanou, C.**, Smaragdakis, G., Poese, I. and Laoutaris, N. "Tracing Cross Border Web Tracking". *In Proc. of the Internet Measurement Conference (IMC'18)*. ACM, Boston, MA, USA, 329-342, 2018. (🏆 Distinguished paper award)

15. **Iordanou, C.**, Soriente, C., Sirivianos, M. and Laoutaris, N. "Who is Fiddling with Prices? Building and Deploying a Watchdog Service for E-commerce". *In Proc. of the Special Interest Group on Data Communications (SIGCOMM'17)*. ACM, Los Angeles, CA, USA, 376–389, 2017.

16. Papaodyssefs, F., **Iordanou, C.**, Blackburn, J., Laoutaris, N., and Papagiannaki, K. "Web Identity Translator: Behavioral Advertising and Identity Privacy with WIT". *In Proc. of the 14th ACM Workshop on Hot Topics in Networks (HotNets'15)*. ACM, Philadelphia, PA, USA, Article 3, 7 pages, 2015.

17. **Iordanou, C.**, Soteriou, V., Aisopos, K. "Hermes: Architecting a Top-Performing Fault-Tolerant Routing Algorithm for Networks-on-Chips". *In Proc. of the IEEE International Conference on Computer Design (ICCD'14)*. Seoul, 424-431, 2014. (Extended work)

18. **Iordanou, C.**, Soteriou, V., Aisopos, K., Kakoulli, E. "Hermes: Architecting a Top-Performing Fault-Tolerant Routing Algorithm for Networks-on-Chips". *In Proc. of the IEEE International Symposium on Networks-on-Chip (NoCS'14)*. IEEE/ACM, Ferrara, Italy, 178-179, 2014. (Resulted from my BSc Thesis)

Editorials

Laoutaris, N., **Iordanou, C.**, "What do information centric networks, trusted execution environments, and digital watermarking have to do with privacy, the data economy, and their future?" *ACM SIGCOMM Computer Communication Review (CCR) 51 (1)*, 2021.

PhD Thesis

Iordanou, C. "Crowdsourcing as a Guardian of Transparency, Privacy, and Anti-discrimination in a Personalized Web". *Technische Universität Berlin*, Doctoral Thesis, 2019.
`http://dx.doi.org/10.14279/depositonce-8207`

Certifications

Linux Professional Institute Certification - 1 (LPIC-1) 2012.

Teaching experience

CYS615: Communication and Network Security (F2023 - present) European University Cyprus

CSC650 Software Engineering (F2022 - present) European University Cyprus

CSC411: Software Engineering I (S2023 - present) European University Cyprus

CSC327/CSC625: Operating Systems (F2022 - present) European University Cyprus

CSC412: Software Engineering II (S2022 - present) European University Cyprus

Teaching Assistant: Computer organization and Design - Assembly language (S2014) Cyprus University of Technology.

Reviewing Experience

ACM The Web Conference, 2025 (WWW'25).

PLOS ONE Journal, 2024.

ACM Conference on Web Search and Data Mining, 2024. (WSDM'24)

ACM SIGIR Conference on Human Information Interaction and Retrieval, 2023 (CHIIR'23)

The 31st International Conference on Computer Communications and Networks, 2022 (ICCCN'22)

ACM The Web Conference, 2022 (WWW'22)

ACM SIGIR Conference on Human Information Interaction and Retrieval, 2022 (CHIIR'22)

ACM Conference on Fairness, Accountability, and Transparency 2021 (FAccT'21)

ACM SigComm Artefacts Evaluation committee 2018 (AE'18)

ACM Internet Measurements Conference 2018 shadow PC (IMC'18)

Mentoring, Training and Advancement of Young Scientists

PhD Research

Tianyue Chu (Universidad Carlos III de Madrid / IMDEA Networks, Reweighed Federated Aggregation with Reputation for Online Sensitive Content Classification - Primary advisor: Prof. Nikolaos Laoutaris)

Santiago Andrés Azcoitia (Universidad Carlos III de Madrid / IMDEA Networks, Towards a Human-centric Data Economy - Primary advisor: Prof. Nikolaos Laoutaris).

MSc Thesis

Dimitrios Mastrogiannis (European University Cyprus, MSc 2024 [Expected 2025]), *"AI-Based Intrusion Detection System for IoT Medical Devices Using Labeled PCAP Files"*

Elisavet Karyofylli (European University Cyprus, MSc 2024 [Expected 2025]), *"Real-Time Web Advertisement Detection Using Computer Vision and AI"*

Panagiotis Nikolaidis (European University Cyprus, MSc 2024 [Expected 2025]), *"Development of a Secure Web Application Framework for Personal Data Protection in Compliance with GDPR"*

Spyridon Lamprou (European University Cyprus, MSc 2024 [Expected 2025]), *"Mapping IT assets to CVE attacks"*

Onoufrios Tzouvas (European University Cyprus, MSc 2024), *"A multiclass text classification task optimization"*

Ioannis Doitsinis (European University Cyprus, MSc 2024) *"Image classification task: Distinguish Web advertisements from regular content."*

Bachelor Thesis

Tsaggarides Panagiotis (European University Cyprus, BSc 2024) *"Large image dataset preprocessing and normalization for an image classification task."*

Konstantinou Ioannis (European University Cyprus, BSc 2024), *"Exploration of Chrome browser extensions capabilities under manifest V3"*

Constantinos Pigkerides (European University Cyprus, BSc 2024, *"Generation of a labeled dataset for web advertisement images"*

Matthias Götze (TU Berlin, BSc 2020), *"Measuring Web Cookies in Governmental Websites"*. Primary advisor: Prof. Georgios Smaragdakis.

Jan Pommerening (TU Berlin, BSc 2018), *"Measuring Authorized Digital Sellers of Popular Websites"*. Primary advisor: Prof. Georgios Smaragdakis.

Invited Talks

"Tracing Cross Border Web Tracking", Brave Software, San Francisco, USA, January 2019.

"Tracing Cross Border Web Tracking", RIPE77, Amsterdam, Netherlands, October, 2018. `https://ripe77.ripe.net/wp-content/uploads/presentations/18-RIPE_2018_GDPR.pdf`

"Personal data and web services, targeted advertisement and price discrimination tools demo", Online Privacy and Web Transparency (Dagstuhl Seminar 17162), Germany, April, 2017.

Consultancy Services

LSTech Ltd. `https://www.lstech.io/`

Programming Skills

ML Libraries: TensorFlow, Keras, TensorFlowJS, scikit-learn

Programming Languages: C/C++, C#, Matlab, Java, Python, PHP, CSS, HTML5, JavaScript, Unix Shell Scripting, Verilog, VHDL

Web frameworks: Node.js, WordPress, Vue.js, React.js, JQuery, FastAPI, express.js

Visualization Libraries: D3.js, Chart.js, matplotlib

Web automation: Google Puppeteer, Selenium

Databases - SQL: MySql, OracleDB, MS-Sql, SQLite3

Live Deployment Systems

The Elephant in the Room (EITR) - Identifying Sensitive URLs (`https://eitr-experiment.networks.imdea.org/`)

eyeWnder - Real time web advertisement analyser (`http://www.eyewnder.webredirect.org/`)

$heriff - The price discrimination detection tool (`http://sheriff-v2.dynu.net/`)

pageInspector[1] - Website analysis and third-party domain inclusion detection tool

Other Skills

Federated machine learning.

Hyperbolic embedding.

EU project proposal writing.

Column oriented database (Yandex clickhouse) for big-data analysis.

Head(-less) Web crawling/scrapping techniques, semantic/topic analysis and Web automation.

Web browser extension development (Mozilla Firefox and Google Chrome).

RESTful based web-apps development and databases

Latex

Network Simulation NS-2

Network-on-Chip Simulator: A Network On Chip (NoC) simulator to evaluate routing algorithm performance in a multiprocessor system. Written in C/C++ under Linux Environment.

🌐	Website:	`https://cosior.github.io`
in	LinkedIn:	`https://www.linkedin.com/in/costas-iordanou-4447a278/`
▶	YouTube:	`https://www.youtube.com/channel/UC3jzlFkM439sGheIyNATY4w`
🎓	Google Scholar:	`https://scholar.google.com/citations?user=Nxo-Yp8AAAAJ`

Last updated: November 2, 2024

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[1]Beta version: `https://bit.ly/pageinspector`