

# ILIANA MARIA XYGKOU

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## EDUCATION

- **Ph.D. in Computer Science**, Georgia Institute of Technology, U.S.A. 08/2022 – (expected) 05/2027
  - GPA: 4.0/4.0
  - Advisor: Prof. Alberto Dainotti
  - Focus: BGP routing security, programmable networks
- **Diploma (Integrated MEng) in Electrical and Computer Engineering** (5-year degree), National Technical University of Athens, Greece 09/2017 – 07/2022
  - Grade: 9.66/10 (3<sup>rd</sup>/318)
  - Concentration: Informatics
  - Diploma Thesis ([Abstract](#)): “Misinformation containment in social network platforms”, supervised by Prof. S. Papavassiliou

## PROFESSIONAL EXPERIENCE

- **PhD Intern**, Cisco ThousandEyes 05/2024 – 08/2024
  - Project: “BGP Zombies Detection” under the guidance of Researcher A. Chariton and Prof. X. Dimitropoulos.
- **Graduate Teaching Assistant**, Georgia Institute of Technology 08/2023 – 05/2024, 08/2024 –
  - Course: Computer Networks / Computer Networking II
- **Research Intern**, Coalition Inc 05/2023 – 08/2023
  - Project “Honeypot Detection” under the guidance of Dr. S. Bell and Dr. D. Woods.
- **Graduate Research Assistant**, Georgia Institute of Technology 08/2022 – 05/2023
- **Technical Support Help Desk**, National Technical University of Athens 09/2021 - 08/2022
  - Resolution of technical issues of NTUA’s new educational Moodle platform, “Helios”, under the guidance of Professors P. Tsanakas and E. Sykas.

## RESEARCH

- Advancement and evaluation of the [Global Routing Intelligence Platform](#) (GRIP), a BGP incident detection and monitoring tool. GRIP detects and classifies BGP incidents including misconfigurations, exact and subprefix misoriginations, as well as AS path manipulation attacks.
- Design and implementation of MORP4, a programmable data plane framework implementing a “dynamic” network telescope. MORP4 adaptively tracks unused space of an organization’s network with configurable time and space granularity and captures only traffic directed towards unused addresses.

## AWARDS AND HONORS

- **Doctoral Scholarship**, Onassis Foundation, 2023-2026
- **Seeds For The Future Scholarship**, Huawei, 2021
  - As part of the “Seeds For The Future” program for students with academic excellence.

## PRESENTATIONS

- “Reviving BGP Zombies: New Insights”, RIPE89 (plenary presentation). Prague, Czechia, October 2024.
- “Observing Trends in Internet Routing Security”, RIPE89 (lightning talk). Prague, Czechia, October 2024.
- “Observing Trends in Internet Routing Security”, Internet Integrity Workshop (invited talk). Prague, Czechia, October 2024.

## **HARD SKILLS**

- **Programming languages:** Python, C++/C, P4, Prolog, Javascript, Java, SML
- **Frameworks:** Express, Flask, NetworkX, React
- **Operating systems:** Windows, Linux, UNIX (FreeBSD)
- **Routing software:** Quagga, FRR
- **Database management systems:** MySQL, PostgreSQL

## **LANGUAGES**

- **Greek:** (native)
- **English:** ECPE C2, 08/2015, TOEFL (Grade: 106/120), 11/2021
- **German:** Goethe-Zertifikat B2, 09/2021

## **VOLUNTEERING EXPERIENCE**

- Volunteer as judge in *Greek National Educational Robotics Competition* hosted by *WRO Hellas* (2018, 2019)
- Volunteer in non-profit actions (cleaning forests, helping in the execution of sports events e.g., "*Greece Race for the Cure*" hosted by Hellenic Association of Women with Breast Cancer "*Alma Zois*" (2017, 2018, 2019))