

# ILIANA MARIA XYGKOU

100 6<sup>th</sup> St, NE, #1004, Atlanta, GA 30308 | [ilianaxigkou@outlook.com](mailto:ilianaxigkou@outlook.com) | +1 (470) 532 0817 | <https://ilianaxn.github.io/>

## EDUCATION

- **Ph.D. in Computer Science**, Georgia Institute of Technology, U.S.A. 08/2022 – *(expected exit as M.S.)* 12/2025
  - 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

- **Graduate Research Assistant**, Georgia Institute of Technology 08/2022 – 05/2023, 01/2025 –
- **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 – 12/2024
  - 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.
- **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”**
  - NANOG93 (Security Track talk). Prague, Czechia, October 2024.
  - RIPE89 (plenary presentation). Atlanta, GA, U.S.A., February 2025.

- **“Observing Trends in Internet Routing Security”**
  - RIPE89 (lightning talk). Prague, Czechia, October 2024.
  - Internet Integrity Workshop (invited talk). Prague, Czechia, October 2024.

## HARD SKILLS

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

## LANGUAGES

- **English:** Proficient -- ECPE C2, 08/2015
- **German:** Upper-Intermediate -- Goethe-Zertifikat B2, 09/2021
- **Greek:** Native

## 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))