

# Eleni Eirini Tsiovoulou

**Contact information:** [el22204@mail.ntua.gr](mailto:el22204@mail.ntua.gr)

**Languages:** Greek (native), English (C2 level), French (B2 level)

**Education:** Electrical and Computer Engineering, NTUA (currently enrolled)

**Affiliation:** Statistical Mechanics and Complex Dynamical Systems Laboratory, INN (NCSR Demokritos)

## Technical Skills:

**Programming Languages:** C/C++, Python, MATLAB, SQL

**Tools & Environments:** Altium Designer, LTspice, MatCont, XILINX Vivado

**Technologies:** C++ STL, Cryptographic algorithms & Machine learning algorithms, Hardware Description Languages (VHDL, Verilog)

## Experience:

- Member of the Statistical Mechanics and Complex Dynamical Systems Laboratory, INN (NCSR Demokritos)

Conducting research on neuromorphic computing systems utilizing Josephson Junctions

- Laboratory teaching assistant at NTUA, for the course of Introduction to Electronics and Telecommunications

## Projects & Volunteering:

- Electroencephalograph (EEG) Hardware Design: Designed an analog front-end PCB for brainwave signal amplification, filtering, and digitalization under the NTUA Circuits and Systems Group.

- IEEE Student Branch – Ethical Hacking Team Coordinator (since September 2024)

- Conference Speaker and organizer: presentation of the cryptography workshop and participation at the organizing team of the IEEE NTUA student branch's conference NTUA HACK 3.0.

- Algorithmic & Security Competitions: achieved top 1% ranking on the Cryptohack platform, with notable placements in HTB UniCTF (7th), GRCPC (23rd), and IEEEExtreme (25th in Greece) in 2023.