# Kalliopi Christina Despotidou

 ♦ Athens, Greece
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### **Education**

#### MSc National and Kapodistrian University of Athens, Network Engineering

Oct 2024 - Present

- Coursework: Wireless Networks, Network Security, Network Analysis and Modeling, Reinforcement Learning, Software-Defined Networking
- · Majors:
  - Wireless Networks and Telecommunications

## **BSc** National and Kapodistrian University of Athens, Informatics and Telecommunications

Oct 2020 - Sept 2024

- **Coursework:** Artificial Intelligence, Data Mining, Digital and Stochastic Signal Processing, Parallel Systems, Information Systems Security
- · Majors:
  - Software Engineering
  - Wireless Communications
- **Thesis:** Beam Management Strategies for Wireless Communications with Reconfigurable Intelligent Surfaces
- Supervisor: George C. Alexandropoulos, Associate Professor NKUA

#### High Model High School of Agii Anargyri

Sept 2014 - June 2020

## School

- Extracurricular Activities: Member of the C the Programming Club, Physics Club and Running Team
- Admissions: Ranked 13th out of 408 students in the entrance exams.

## Experience \_\_\_\_\_

#### Teaching Assistant, National and Kapodistrian University of Athens

Oct 2024 - Present

- Courses: Introduction to Programming, Introduction to Computer Security
  - Graded assignments, conducted oral exams and supported students.
- Merit-based scholarship covering master's tuition in exchange for teaching duties.

### Research Assistant, NOESYS Lab, National and Kapodistrian University of Athens

Sept 2024 - Present

• Collaborating with faculty and researchers on advancing key lab projects.

Private Math Tutor 2021–2023

• Provided one-on-one math tutoring for primary and high school students.

## **Volunteering** \_

## **Conference Volunteer – Registration and Speaker Support**, IEEE International Symposium on Information Theory

Athens, Greece, July 2024

• Managed attendee registration and facilitated effective communication between organizers and participants, ensuring seamless event operations.

## **Projects**

#### **Berkeley Pacman Project**

• Implementations of Project 1 and Project 2 from Berkeley's CS188 course, featuring search algorithms (DFS, BFS, A\*) and multi-agent systems with Artificial Intelligence for the Pacman game.

#### **Multi-Threaded File Server**

• Multi-threaded file server for handling concurrent client requests using shared memory, semaphores and pthreads.

#### **xv6 Operating System Project**

• A solution to the Operating Systems course project, based on the XV6 operating system. Implements key concepts in operating systems, including process management and system calls, in a modern RISC-V environment.

#### **Computational Geometry Project**

• Implementation of computational geometry algorithms for the course Computational Geometry, including convex hulls, Voronoi diagrams, Delaunay triangulations, and linear programming.

#### **Network Simulation**

• Simulating a sensor network using WiFi-Mininet simulator and the Thingsboard.

#### **LMS Adaptive Filtering**

• MATLAB scripts for implementing and analyzing adaptive filtering using the Least Mean Squares (LMS) algorithm.

#### **Linux Terminal Simulator**

• Developed a Linux terminal simulator in C++, replicating core functionalities such as command execution, file manipulation, and process management.

#### **Multi-Threaded Voting System**

• Designed and implemented a multi-threaded voting system in C++, featuring a network server for vote handling, a batch client for automated testing and bash scripts for vote tallying and log processing.

#### **Deep Reinforcement Learning with Gym**

- Implemented Deep Q-Network (DQN) in PyTorch for Gym environments.
- Applied advanced techniques like Double DQN, Dueling Networks, PPO, A2C, conducted hyperparameter tuning and explored LSTM/GRU/Transformer models.

#### Skills

Languages: Python, C, C++, Matlab, SQL, JavaScript

Technologies: Pytorch, Hugging Face, Git, GitHub, Pandas, NumPy, SQL, Linux, Windows

**Soft Skills:** Team Player, Listener, Communicative, Positive, Critical Thinker, Work Enthusiast, Strong Work Ethic, Time Management

Languages: Greek (Native), English (Proficient), French (Proficient), Spanish (Intermediate)