

# Christos Zarkos

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## Education

**Massachusetts Institute of Technology** Cambridge, MA, 2023-2028 (expected)  
PhD in Electrical Engineering and Computer Science, advised by Prof. Christina Delimitrou **GPA(Current): 5.0/5.0**

**University of Crete** Heraklion, Greece, Sept. 2019 - June 2023  
Bachelor's in Computer Science **GPA: 9.62/10.0 (Valedictorian)**

**Universitat Polytecnic de Catalunya** Barcelona, Spain, Sept. 2022 - Jan. 2023  
Erasmus+ exchange program, studying Computer Science

## Experience

**Microsoft Research Redmond** May 2024 - August 2024

### Research Intern

- Worked on AI-driven Hardware Design, alongside Shuotao Xu and Lei Qu

**University of Crete** Feb. 2023 - June 2023

### Teaching Assistant for the class CS255 Systems Programming Lab

- Held recitations, weekly office hours and graded assignments, midterm and final exams

**Barcelona Supercomputing Center** Sept. 2022 - Jan 2023

### Visiting Junior Researcher

- Implemented part of my bachelor's thesis as a member of the CAOS group, advised by Dr. Leonidas Kosmidis

## Projects

### SPARROW-SV (Bachelor's thesis)

**Implementation of a SIMD Unit for AI Acceleration for a RISC-V Processor** SystemVerilog, C

- Implemented a SIMD unit in SystemVerilog and integrated it into an industry proven RISC-V processor (Veer EH1 RISC-V Core by Western Digital)
- Operated Logical Synthesis, area and timing analysis of the design with EDA tools (DesignCompiler)

### Ka-chow

**[6.5930] Hardware Architecture for Deep Learning Final Project** Jupyter Notebook, Python

- 3-member group project
- Implemented a simulation of the performance of the Lightning photonic accelerator on CiMLoop

### AlphaCompiler

**Compiler's class University project** C

- 3-member group project, apart from implementation, in charge of coordinating the tasks assigned to each member
- Implemented a Compiler and a Virtual Machine for a javascript-like language (written in C)

## Awards and Honors

**Onassis Foundation PhD Fellowship** Sept. 2024 - Aug. 2027

For PhD studies at MIT

**Greek Institute of National Scholarships Excellence Scholarship** Dec. 2023

Awarded from the Greek Institute of National Scholarships for being the valedictorian of the class of 2023 for the Computer Science Department of the University of Crete

**Paris Kanellakis Fellowship** Sept. 2023

For the first year of PhD studies at MIT

**Elisavet Karamintzou Scholarship** July 2023

Awarded from the University of Crete for being the valedictorian of the class of 2023 for the Computer Science Department

**Stelios Orphanoudakis Scholarship** Sept. of 2020, 2021, and 2022

Awarded from ICS-FORTH all three possible years during my Bachelor studies in the Computer Science Department of UoC (2019-2020, 2020-2021 and 2021-2022) for being among the top3 students of the class (first all 3 years)

## Service

DATE 23 Conference, D9 track

Fall 2022

*Paper Sub-reviewer*

## Skills

**Programming Languages, Technologies & Tools** : SystemVerilog, C, C++, VHDL, Python, Java, R, OpenMP, Vivado, EDA, Git, LaTeX, Linux

**Languages** : Greek (Native Language), English (C2), Spanish (B2)

## Areas of interest

Computer Architecture, Computer Systems, Cloud Computing, Hardware/Software Codesign, FPGAs, Embedded Systems