

# Christos Zarkos

[website](#) | [czarkos@mit.edu](mailto:czarkos@mit.edu) | [in](#) [christos-zarkos](#) | [czarkos](#)

## Education

<b>Massachusetts Institute of Technology</b> (Cambridge, MA, USA) PhD in Electrical Engineering and Computer Science, advised by Prof. Christina Delimitrou	Sept. 2023 - May 2028 (expected)
<b>Massachusetts Institute of Technology</b> (Cambridge, MA, USA) Master's of Science in Electrical Engineering and Computer Science, advised by Prof. Christina Delimitrou	Sept. 2023 - May 2025
<b>University of Crete</b> (Heraklion, Greece) Bachelor's in Computer Science <b>GPA: 9.62/10.0 (Valedictorian)</b>	Sept. 2019 - June 2023
<b>Universitat Polytecnic de Catalunya</b> (Barcelona, Spain) Erasmus+ exchange program, studying Computer Science	Sept. 2022 - Jan. 2023

## Experience

<b>Microsoft Research Redmond</b> <b>Research Intern</b> <ul style="list-style-type: none"><li>Worked on AI-driven Hardware Design, alongside Shuotao Xu and Lei Qu</li></ul>	May 2024 - August 2024
<b>University of Crete</b> <b>Teaching Assistant for the class CS255 Systems Programming Lab</b> <ul style="list-style-type: none"><li>Held recitations, weekly office hours and graded assignments, midterm and final exams</li></ul>	Feb. 2023 - June 2023
<b>Barcelona Supercomputing Center</b> <b>Visiting Junior Researcher</b> <ul style="list-style-type: none"><li>Implemented part of my bachelor's thesis as a member of the CAOS group, advised by Dr. Leonidas Kosmidis</li></ul>	Sept. 2022 - Jan 2023

## Publications

<b>SERenaDE: Hardware Acceleration of Serialization Frameworks</b> (under submission) <i>Christos Zarkos, Nikita Lazarev, Qihang Chen, Shabnam Sheikha, James Tsai, Andy Anderson, Bhusan Chitlur, Christina Delimitrou</i>
--

## Workshop Publications

<b>Hermes' SERenaDE: Hardware Acceleration of Serialization Frameworks</b> (YArch'25) <i>Christos Zarkos, Nikita Lazarev, Shabnam Sheikha, Christina Delimitrou</i>
--

## Awards and Honors

<b>Athans Memorial PhD Fellowship</b> For the third year of PhD studies at MIT	Sept. 2025
<b>Onassis Foundation PhD Scholarship</b> For PhD studies at MIT	Sept. 2024 - Aug. 2027
<b>Greek Institute of National Scholarships, Excellence Scholarship</b> 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	Dec. 2023
<b>Paris Kanellakis Fellowship</b> For the first year of PhD studies at MIT	Sept. 2023
<b>Elisavet Karamintzou Scholarship</b> Awarded from the University of Crete for being the valedictorian of the class of 2023 for the Computer Science Department	July 2023
<b>Stelios Orphanoudakis Scholarship</b> 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)	Sept. of 2020, 2021, and 2022

## 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**

#### ***CS340 Programming Languages and Compilers University project***

C

- 3-member group project
- Implemented a Compiler and a Virtual Machine for a javascript-like language (written in C)

## 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