Christos Zarkos

website | czarkos@mit.edu | christos-zarkos | czarkos

Education

Massachusetts Institute of Technology (Cambridge, MA, USA) Sept. 2023 - May 2028 (expected)
PhD in Electrical Engineering and Computer Science, advised by Prof. Christina Delimitrou

Massachusetts Institute of Technology (Cambridge, MA, USA) Sept. 2023 - May 2025
Master's of Science in Electrical Engineering and Computer Science, advised by Prof. Christina Delimitrou

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

Publications

SERenaDE: Hardware Acceleration of Serialization Frameworks (under submission)

Christos Zarkos, Nikita Lazarev, Qihang Chen, Shabnam Sheikhha, James Tsai, Andy Anderson, Bhusan Chitlur, Christina Delimitrou

Workshop Publications

Hermes' SERenaDE: Hardware Acceleration of Serialization Frameworks (YArch'25)

Christos Zarkos, Nikita Lazarev, Shabnam Sheikhha, Christina Delimitrou

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)

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