Ella Schwarz

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github.com/schwarz-em

EDUCATION

University of California, Berkeley,
Ph.D. in Electrical Engineering and Computer Science
Anticipated Graduation: May 2028
University of California, Berkeley, B.A. in Computer Science and Mathematics

EXPERIENCE

Design Verification Intern   *May 2023 - Aug 2023*
Apple, Cupertino CA
- Increased chance to find performance bugs by developing a python script to automatically calculate the worst case time to trigger a resource unavailability
- Designed check to guarantee that DMA addresses are not overlapping

Design Verification Intern   *May 2022 - Aug 2022*
Marvell Semiconductor, Austin TX
- Created coverage analysis report to provide customer with a clear picture of verification status
- Automated regressions through python scripting, Cadence vManger and Jenkins tools to speed up engineer workflow and achieve customer deliverables faster
- Designed register read/write tests to verify PCIe subsystem

Undergraduate Researcher   *Fall 2020 - Spring 2023*
ADEPT Lab, Berkeley CA
- Implemented state-of-the-art prefetchers and designed a baremetal prefetcher benchmarking framework for users to add prefetchers to custom SoCs
- Integrated System Verilog embedded core (Ibex) from an external contributor into Chipyard
- Wrote a Dockerfile to diversify and accelerate the new user repository setup experience

ACHIEVEMENTS

Semiconductor Research Corporation Undergraduate Research Program   2022-2023
UC Berkeley EECS Honors Program   2022-2023

SKILLS

Programming languages: Python, Java, C, RISC-V Assembly, Scala, Chisel, and Verilog
Hardware Development: Synopsys Simulation Tooling, FPGA Emulation
Other: AWS EC2, Docker, Git, Make, Bash
Speaks conversational Mandarin Chinese