Orhan Unuvar

ounuva@gmail.com

EDUCATION

- **Bogazici University** (GPA: 3.95/4.00, Class Ranking: 3rd/127) Sep 2020 – Jan 2025
  B.S., Computer Engineering

- **University of Texas at Austin** Jan 2023 – May 2023
  Exchange Student, Electrical and Computer Engineering

EXPERIENCE

- **ETH Zurich** Oct 2024 - Present
  Research Intern (Supervisor: Prof. Onur Mutlu)
  - Working on return address stack optimizations for functional programming languages

- **Ecole Polytechnique Federale de Lausanne (EPFL)** Jun 2024 - Aug 2024
  Research Intern (Supervisor: Prof. Babak Falsafi)
  - Worked on QFlex, a family of full-system cycle-level functional-first and timing-first simulators
  - Implemented a test suite for the functional model decoder that discovered bugs in 23 instructions
  - Fixed a bug in the timing model that corrupted physical registers and several other bugs

- **University of Texas at Austin** Sep 2023 - May 2024
  Senior Design Project (Supervisor: Prof. Yale Patt)
  - Designed and implemented an out-of-order RISC-V core from scratch in structural Verilog
  - P6-style implicit register renaming, back-to-back dependent instruction execution

- **Bogazici University** Sep 2023 - Present
  Teaching Assistant (Courses: Digital Systems, Computer Organization)
  - Instructed 100+ students in weekly hardware and software labs, answered their questions

- **University of Texas at Austin** May 2023 - Jul 2023
  Research Intern (Supervisor: Prof. Sandeep Chinchali)
  - Investigated an efficient collaborative sampling algorithm for robotic fleet training
  - Conducted experiments to evaluate our proposed algorithm and the baselines
  - Helped formally prove a lower bound on the dataset quality achieved by our algorithm
  - Wrote key sections of the main paper, multiple appendix sections, and rebuttals

PUBLICATIONS

- **Fleet Active Learning: A Submodular Maximization Approach**
  Oguzhan Akcin, Orhan Unuvar, Onat Ure, Sandeep P. Chinchali
  7th Annual Conference on Robot Learning (CoRL 2023), Atlanta, USA

HONORS & AWARDS

- Selected for $60,000/year Fulbright Master's scholarship but chose not to accept the offer
- First place award in the UT Austin ECE Spring 2024 Honors Senior Design course
- Three-month fellowship for Summer@EPFL 2024 (top 1.6% of ~5,000 applicants)
- uArch workshop travel grant for MICRO 2024, student travel grant for CoRL 2023
- 15th place among 2.5 million students (top 0.0006%) in the Turkish university entrance exam

SKILLS

- Topics: Processor Microarchitecture, Computer Architecture Simulation, RTL Design
- Languages: Assembly, Bash, C, C++, Python, SystemVerilog
- Tools: UNIX, Git, GDB, Vivado, ModelSim, QEMU, Intel Pin, OpenRAM, FreePDK-45nm