

Yousef Al-Shinnawi

yalshinnawi.github.io ♦ linkedin.com/in/yousef-alshinnawi ♦ yalshinnawi@berkeley.edu

Education

University of California, Berkeley, CA

Aug 2019 – Dec 2021

Bachelor of Science in Electrical Engineering and Computer Science (EECS)
UC Regents' and Chancellor's Scholar

Hartnell College, Salinas, CA

Aug 2017 – May 2019

Associates of Transfer
Valedictorian

Relevant Coursework: CS61A: (Python, SQL), CS61B: Data Structures (Java), CS61C: Computer Architecture (C, SIMD, OMP), CS161: Computer Security (C, Go), CS162: Operating Systems (C), CS188: Intro to Artificial Intelligence, EE16B: Designing Information Devices and Systems II, EECS106A: Intro to Robotics (ROS), EECS151: Intro to Digital Design and Integrated Circuits (Verilog), EE290-2: Hardware for Machine Learning

Skills

Languages: Java, Python, C, Verilog, MATLAB, SQL, JavaScript, HTML, CSS, RISC-V, x86, Go

Tools/Libraries/OS: Git, NumPy, SIMD, OMP, Altium, LTSpice, Linux, ROS, Gazebo, Bootstrap, jQuery

Projects & Experience

Zillow, San Francisco, CA

June – Aug 2021

Software Engineering Intern

Naval Postgraduate School (NPS), Monterey, CA

June – Aug 2019

NREIP Intern, Hardware/Software Team

- ❖ Designed PCBs in Altium and soldered all components for a High-Altitude Balloon (HAB) in a high security satellites lab.
- ❖ Collaborated on a large team and held numerous design meetings to delegate work and set deadlines.
- ❖ Developed the first HAB at NPS with watchdog timer software and lead rechargeable batteries to fly over 50,000 ft. (20% better than the previous years)

CPU Design

Fall 2020

EECS151: Introduction to Digital Design and Integrated Circuits – UC Berkeley

- ❖ Designed a 3-stage pipelined CPU in Verilog to run on a Zynq 7000-series FPGA to run base RV32I.
- ❖ Optimized the CPU to reach a final clock speed of ~76MHz, 52% greater than its initial speed.
- ❖ Ran through several design reviews and collaborated with a small team to produce the final product.

Reinforcement Learning

Spring 2020

CS188: Introduction to AI – UC Berkeley

- ❖ Implemented different versions of value iteration and Q-learning based on the Bellman Ford Algorithm to train a robot crawler and Pacman.
- ❖ Experimented with learning parameters to optimally train the agent and efficiently explore its environment.

Leadership & Extracurricular Activities

Associated Students of Hartnell College (ASHC)

Aug 2018 – May 2019

Senator At Large, Technology Council

- ❖ Developed a new website for the college as a representative on the board of the Technology Council
- ❖ Led college elections and put together celebrations for over 7000+ students.
- ❖ Provided a \$20,000 endowment to support homeless and low-income students in the Salinas area

Hartnell College

Jan – May 2019

Undergraduate Supplemental Instructor, Calculus 2 and Circuit I

- ❖ Organized daily study sessions to reinforce core concepts, and monitored group/peer-led discussions
- ❖ Developed material and lessons that helped increase over 80% of student's grades by an entire letter