# 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**)

## Skills

**Languages:** Python, Java, C, Go, C++, Verilog, MATLAB, SQL, JavaScript, HTML, CSS, RISC-V
**Tools/Libraries/OS:** Git, NumPy, SIMD, OMP, Altium, LTSpice, Linux, ROS, Gazebo, Bootstrap

## Projects & Experience

**Zillow, San Francisco, CA** — **June – Aug 2021**
*Software Engineering Intern – Account Security*

**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.

**Secure File System** — **Spring 2021**
*CS161: Computer Security – UC Berkeley*

- Designed an online secure file system where users create accounts and create/share files with other users.
- Encrypted all user data using Public Key Encryption and Symmetric Encryption schemes to uphold confidentiality, integrity, and authenticity on the data server.

## 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