

Yousef Al-Shinnawi

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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:** Structure & Interpretation of Computer Programs (**Python, SQL**), **CS61B:** Data Structures (**Java**), **CS61C:** Great Ideas in Computer Architecture (**C, SIMD, OMP**), **CS188:** Introduction to Artificial Intelligence, **EE16B:** Designing Information Devices and Systems II, **EECS106A:** Introduction to Robotics, **EECS151:** Introduction to Digital Design and Integrated Circuits

Skills

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

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

Projects & Experience

Naval Postgraduate School (NPS)

June – Aug 2019

NREIP Intern, Hardware/Software Team

- ❖ Designed two 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)

Gitlet – Version Control System

Spring 2020

CS61B: Data Structures – UC Berkeley

- ❖ Designed a version control system mimicking the basic features of Git.
- ❖ Implemented a tree-like structure to store previous commits and designed efficient algorithms to merge, commit, checkout and remove files.

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 and then exploit its options.

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