MAX MOREHEAD

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EDUCATION

University of California, San Diego *Sept. 2017–Present*
BS in Computer Science Expected Graduation Date: June 2021
Current GPA: 3.58

EXPERIENCE

Robotics and Programming Tutor, Valley View Middle School *Sept. 2014–June 2018*

- Helped start and sustain an after-school robotics program, working with middle school technology teacher.
- Worked as volunteer and paid staff for the Girls in Robotics Leadership (GIRL) week-long camp; tutored middle school girls and fixed technical problems.
- As Head Coach for the 2017 GIRL camp, adapted and developed GIRL camp curriculum and plans; worked to adapt curriculum for 2018 STEM camp for boys as Head Coach.

FIRST Robotics Team 6662, Founder, Former President, and Mentor *Jan. 2016–Present*

- Founded a high school robotics team from scratch over the course of two years.
- Participated in the intensive and international FIRST Robotics competition, leading team to Judge's award.
- Learned, applied and taught engineering, automation, fabrication, and Java programming skills.
- Currently serve as an adult mentor.

Research Intern, Michigan State University *June 2016–Aug. 2016*

- Research team member under Dr. Laura Chomiuk, building an open-source repository of data from novae, a type of astronomical object
- Led design for Open Novae Catalog; learned and applied Python and git skills.

PROJECTS

Nut Shell – Built a Unix shell interpreter in Rust to learn about the interaction between the OS and the shell.

RELEVANT COURSES

CSE 100 – Advanced Data Structures	Data structures in C++, including balanced BSTs, hash tables, tries, huffman coding, and graph data structures and algorithms.
CSE 190 – Deep Learning	Introduction to deep learning and modern neural networks. Projects include implementing backprogation in NumPy for MNIST and facial expression classification, using CNNs for lung disease classification (Xray-14 dataset) with PyTorch, and using RNNs for beer review generation in PyTorch.

SKILLS

- Proficient in C++, Java, Python, and Rust in Linux
- Familiar with web technologies (Javascript, CSS, HTML), Lisp (Scheme and Clojure), and SQL
- Mechanical CAD (e.g Solidworks, Fusion 360), Electrical CAD (e.g. OrCAD Capture, KiCAD)

INTERESTS

- 12th place in southern California ICPC regional (competitive programming)
- Participated in MIT Battlecode game AI competition
- Built a physical pinball machine using Arduino C and Fusion 360 CAD