MAX MOREHEAD

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EDUCATION

University of California, San Diego *Sept. 2017–Present*

Current GPA: 3.56

EXPERIENCE

ServiceNow, Intern and Assoc. Software Enginner *June 2019–Present*

- Work as part of a software engineering team to create and maintain underlying platform for customers to create programmable API endpoints (as a summer intern and now part time)
- Fix bugs, write tests, and implement features for REST and GraphQL API systems
- Completed project to provide extensible load statistics page for use by the load balancer

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.
- Since high school, I've developed and taught engineering, automation, fabrication, and Java programming curriculum to high school students as an adult mentor

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; taught middle school girls programming, technical, and leadership skills
- 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.

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 (now CSE 154) – 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.
CSE 131 – Compilers (in progress)	Implementation of an x86 native code compiler from scratch in OCaml, including lexing and parsing, type checking, garbage collection, and optimization using ANF

SKILLS

- Proficient in C++, Java, Python, Rust, and OCaml for 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

- Best placer from UCSD in regional, multi-university ICPC contest as part of competitive programming club
- Built a physical pinball machine using Arduino C and Fusion 360 CAD