Kevin Kellar

Computer Science Undergraduate (Graduating Spring 2021)
4438 NW Boxwood Drive, Corvallis OR, 97330
kkevlar | 541-224-6877 | kellar@calpoly.edu | kellar-kevin

Objective

Seeking embedded software engineering roles targeting performance and safety critical applications

Education

California Polytechnic University — *San Luis Obispo, CA*
B.S. in Computer Science — *Fall 2017 - Present*

- Major GPA: **3.9** — Cal Poly Cumulative GPA: **3.9** — Expected graduation **Spring 2021**
- Exceeded in **Algorithms**, **Operating Systems**, **Computer Architecture**, and **Microcontrollers**

Work Experience

Zipline International — *South San Francisco, CA*
Embedded Software Engineering Intern — *March-September 2020*

Apple: Special Projects Group — *Santa Clara, CA*
Software Engineering Intern — *Summer 2019*

- Thirteen weeks of **systems programming** experience targeting real time **embedded** operating system
- Extensive work with test driven development, using **cmocka for unit test mocking**
- Worked with **bazel** build system to target **both Linux and MacOS**, as well as the primary RTOS

Dynamic Robotics Laboratory (II) — *Oregon State University*
Research Experience for Undergraduates (REU) — *Summer 2018*

- Developed **Cassie Trajectory Editor**, a tool to manipulate walking gaits for the bipedal robot Cassie
- Wrote C in Ubuntu Linux to link with C++ libraries such as **MuJoCo Physics Simulator** and **GLFW**
- Self-taught **Matplotlib** in Python for visualizing subtle differences robot trajectories and solver outputs

Dynamic Robotics Laboratory (I) — *Oregon State University*
High School Research Assistant — *Summer 2017*

- Completed projects in Arduino, Teensy, Unix, and VR by **independently learning C**
- Assisted in robotics research in the field of path planning, decision making, and teleop controls
- Documented the finished software tools and wrote setup instructions for use within the organization

Programming Skills

POSIX C Developed over a dozen POSIX system programming projects using **dynamic memory management**
MCU Arduino/TI-Launchpad projects including a simulated xbox controller and **autonomous robot drive code**
Git Developed **dozens of public GitHub projects**, including work with rebase, cherry-picks, and code reviews
Build Experience with the **Bazel build system** and writing complex **(GNU) Makefiles** for projects with many targets
Testing Developed systems level software using test-driven development and the **cmocka testing library**
Android Published **two Android applications** to the **Google Play Store**, using Android Studio, **Java**, and XML
Python Wrote a **Self Learning** Tic-Tic-Toe program in Python, which learns as the user plays against it
Unix Comfortable scripting with programs such as sed, grep, as well as **testing** systems-level software
SSH Built a **home file server**: experience with ssh server setup, ssh tunneling, and RSA key setup

Honors & Awards

Competitions

2019 **2nd Prize**: Roborodentia: Cal Poly's Autonomous Robotics Competition — *Cal Poly, SLO*
2018 **1st Prize**: Roborodentia: Cal Poly's Autonomous Robotics Competition — *Cal Poly, SLO*
2018 **2nd Prize**: Winter SLOHacks: Developed a networked Android application — *Cal Poly, SLO*