Kevin Kellar

COMPUTER SCIENCE UNDERGRADUATE (GRADUATING SPRING 2021)

4438 NW Boxwood Drive, Corvallis OR, 97330

Objective.

Six month Co-op in Computer Science or Software Engineering, starting Spring 2019

Education

California Polytechnic University

San Luis Obispo, CA

Fall 2017 - Present

B.S. IN COMPUTER SCIENCE

- Major GPA: **4.0** Cal Poly Cumulative GPA: **3.91**
- Completed **Data Structures**, **OO Java**, and Intro To Computer Organization (**Assembly**)
- Finished **Systems Programming** (C programming in Unix environment) in Spring 2018
- Completion of Calculus Series (I IV), Physics Series (I III), and Technical Writing for Eningeers

Work Experience

Dynamic Robotics Laboratory (II)

Oregon State University

Summer 2018

RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU)

- 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
- Developed an **Inverse Kinematics engine** to solve leg joint positions for a user-defined foot target position
- 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

Electical Engineering and Computer Science Department

Oregon State University

APPRENTICESHIP IN SCIENCE AND ENGINEERING

Summer 2015

- 300 hours of software development and computer skills experience
- Co-Contributor of **ICST research paper** "TSTL: the Template Scripting Testing Language"
- Self-taught basic shell scripting and using Linux-based systems as a development platform

Programming Skills.

Git Developed **dozens of GitHub projects**, resolved complex merge conflicts, and used issues / pull requests

Android Published **two Android applications** to the **Google Play Store**, and learned to use XML for interface design

Networking Developed two networked Java applications: a simple chat room and a multi-user Android app

Python Wrote a **Self Learning** Tic-Tic-Toe program in Python, which learns as the user plays against it **Data Structs** Comfortable writing and using **hashtables and priority queues** in Java, C, and Python

Unix Shell Comfortable scripting with Unix programs such as sed, grep, and conditionals for simple tasks

GCC / Make Devloped over a dozen Unix C projects using memory management, raw pointers, and complex Makefiles

Arduino Written Arduino/Teensy sketches including a simulated xbox controller and **autonomous robot drive code**

SSH Built a **home file server**: experience with ssh server setup, ssh tunneling, and RSA key setup

Security Involvement with Cal Poly WhiteHat, competing in frequent Capture-The-Flag cybersecurity challenges

Honors & Awards

EXTRACURRICULAR

2018 **1st Prize**: Roborodentia: Cal Poly's Autonomous Robotics Competition Cal Poly, SLO Cal Poly, SLO

2018 **2nd Prize**: Winter SLOHacks: Developed a networked Android application

ACADEMIC

2017 **Green & Gold Merit Scholarship**: Contribution to University's academic life

Best in Class: AP Computer Science, Singapore American School

Cal Poly, SLO SAS, SG

KEVIN KELLAR · RESUME **SEPTEMBER 19, 2018** REFERENCES AVAILIBLE ON REQUEST