Michael **Pollind**

COMPUTER SCIENCE · SOFTWARE ENGINEER

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Summary

I am a research assistant at the Chapman Rinker Campus developing embedded boards to collect data in physical rehabilitation and also provide tools that aid in rehabilitation. I've been programming since High School and spend my extra time working on a selection of projects to improve my current skill-set. I work on Terasology, an open source block building game with an focus on modding.

Education

Chapman University   *1 University Dr, Orange, CA 92866*

M.S. IN COMPUTATIONAL SCIENCE   *2018 - 2019*

B.S. IN COMPUTER SCIENCE   *2014 - 2018*

Experience

Chapman Rinker   *9401 Jeronimo Rd, Irvine, CA 92618*

RESEARCH ASSISTANT   *Nov 2017 - Present*

- Worked with Professor Soangra and developed tools for physical therapy. This work focused on providing treatment through the use of and design of embedded devices. Provides non-invasive intervention methods as an alternative means of treatment.
- Built custom board around an AVR micro-controller and flashed it with custom AVR code along with custom layout to interface with embedded components and sensors
- Designed a PCB in kicad and had the final board manufactured from a fab facility. This is a miniaturization of the original stack of boards.
- Developed QT app for data collection for Mbient sensors.

Voxx Analytics & Chapman University   *1 University Dr, Orange, CA 92866*

VOXX CLIMATE RESEARCH IN ASSOCIATION WITH CHAPMAN UNIVERSITY   *Dec 2017 - Present*

- Worked on meta study related to analyzing climate papers from Web Of Science, and NSF.
- Built a web scraper in nightmare.js to scrape data from Web of Science (WOS), a research paper index, and also collected data from NSF grant database
- Used dplyer and R to clean and remove duplicates from WOS along with Postgres to finalized the cleaned data
- Carnegie Classification was used to rank publications from each institution along with the associated journal.

MovingBlocks

GOOGLE CODE-IN MENTOR   *Nov 2017 - Jan 2018*

- Helped students learn the ins and outs of open source development and also provided support when finishing tasks. This work actively improved improved Terasology.
- Students worked on tasks that contributed work to Terasology that include: Terasology Modules, Engine, UI, User Documentation, Javadocs, research, etc ...
- Selected as mentor to visit Google campus.
- Reviewed work submitted by a student (code review, documentation review, javadocs, etc...)

LCPtracker, inc   *E Chapman Ave, Orange,CA 92866*

INTERN COMPUTER PROGRAMMER   *Jun 2015 - Aug 2015*

- Implemented a mobile Xamarin application for labor compliance.
- Implemented MVVM patterns and repository patterns for an Sqlite backend
- Implemented a way to consume API request from an ASP.NET server.

Projects

S.M.A.R.T (github.com/GaitRehabilitation/SMART))

CHAPMAN RINKER

- A QT tool that interfaces with Mbient sensors for the use of streaming and collecting live data.
- Configurations for a set of sensors can be saved to a set of profiles that can be later loaded from the application
- Implements back-end binding for windows and linux BLE

Qsys (https://github.com/aarongrisez/Qsys)

PERSONAL

- Qsys is a C++ library used in Qhord, a game that introduces people with Quantum mechanical systems.
- Developed the basic template for the project that includes building against godot, along with testing and verification