NOAH PAN

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Git

- Interested in developing and deploying robust and quality software applications for all platforms
- 4 years of coding experience through embedded hardware, course work, and self-learning
- Self-starter, motivated, and comfortable in fast-paced environments

EDUCATION

Rensselaer Polytechnic Institute, *Troy, New York* *September 2015- May 2019*
B.S Electrical Engineering and Design, Innovation, & Society
Cumulative GPA: 3.7/4.0, (Dean's List x6, Rensselaer Leadership Award)

TECHNICAL PROFICIENCIES

C/C++, Python, Java, HTML5, CSS, Javascript ES6, Git, Bash scripting Linux, Data structures/ Algorithms, Software Documentation, IoT, Raspberry Pi, Embedded Hardware, STM32, electrical measuring tools, Oscilloscope/ Function Generator

RELEVANT PROJECTS

Automatic Model Placer: C++ application that takes a series of STL files, parses the data, and uses a bin packing algorithm to recursively split up a 2D plane into rectangle. The program optimally places a series of models based on size and orientation.
Technical Skills: C++, Bin-Packing Algorithm, Qt Creator

GCode Recovery Application: Programmed a python executable that aids the process of recovering failed 3-D prints. Coded a front-end that processes user input and a back-end which constructs a recovery file based on the user input and parsed data.
Technical Skills: Python, Software Design, Application Development

OpenCV Driven Rover: Python application written with the OpenCV package that utilizes a laptop's webcam to translate a tennis ball's relative location within the camera's FOV to a robotic car movement.
Technical Skills: Python, Real-time computing, TCP/IP communication protocol

PROFESSIONAL EXPERIENCE

re:3D, Houston TX
Embedded Software Engineering Intern *May 2019- Present*
re:3D is a 3-D Printer manufacturing company that produces 6 different models of 3-D printers.
By utilizing these work I did on the firmware level, I designed a multi-client server that used socket programming to collect data from multiple Gigabot 3-D printers. Each client consists of a 3-D Printer communicating with a Pi through Serial inputs. That data is sent to the server to be parsed. This data collection serves to show machine reliability, consistency, and performance
Technical Skills: Linux Development, Qt Creator, Socket-Programming, Multi-Client Server Design

Software Engineering Intern *May 2018- November 2018*
As a software engineer, I updated re:3D's outdated software package to the latest version of the open-source firmware, Marlin. I extensively used Git version control to streamline software development and maintenance. I debugged the software based through internal testing and scheduled software updates to customers.
Technical Skills: C/C++, Python, Git, Git Bash Scripting, Open-source Software

SKILLS AND ABILITIES

Public Speaking, Leadership, Google & Microsoft Suites, Solve a Rubik's Cube under 10 seconds

ATHLETICS AND ACTIVITIES

Captain, *RPI NCAA Division III Men's Swimming and Diving* *September 2015- Present*
Captain of the 2017-2018, 2018-2019 season, 400 Medley Relay & 200 Medley Relay Record Holder, UNYSCSA All-Academic Scholar, Liberty League All-Academic Scholar

Member, *Eta Kappa Nu, Beta Nu Chapter* *December 2017-Present*
Active member of the Rensselaer chapter of the National honor society for outstanding electrical engineers, electric power engineering, and computer and systems engineering.