Jonathan Zybert

Software Engineer

Personal Info

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Interests

Technical
Robotics
Artificial Intelligence
Animation
Space

Personal
Épée Fencing
Guitar
Oil painting
826 Boston

EXPERIENCE

Software Engineering Co-op | Accion Systems, Inc. *January 2018 - June 2018*
• Created a Python- and Chrome-based GUI to communicate with Accion's propulsion systems
  • Utilized Flask microframework, Bokeh (for real-time graphing), HTML CSS (Sass), and JavaScript (jQuery) to make the GUI streamline and intuitive
  • GUI can send and receive bytes from the microcontroller via UART, drive system functions, monitor and graph telemetry data, and log gigabytes of data to binary, CSV, and HDF5 file formats
• Programmed embedded software in C to enable the testing of electronics without actually firing thrusters
  • Wrote low-level MSP430 driver code and improved the current code to support multiple UARTs on a single board
  • Implemented a command parser for text-based interaction via UART, a register map for reads and writes, and daisy-chained bootloader functionality

Software Engineering Co-op | QuickBase, Inc. *January 2017 - June 2017*
• Added functionality to the webhooks feature using Java, C++, SQL, HTML, and CSS
• Collaborated with a team to add an email notification system to alert customers of failing webhooks resulting in a 60% decrease in webhook errors
• Implemented front-end UI features for table reports using React-Redux JavaScript and Node.js REST APIs

EDUCATION

Northeastern University *September 2015 - May 2020*
Candidate for a Bachelor of Science in Computer Science
GPA: 3.675/4.0
Courses: Algorithms, Artificial Intelligence, Computer Systems, Embedded Design, Fund. of Computer Science 1 & 2, Networks, OOD, Programming Languages

TECHNICAL SKILLS

Languages	Java | JavaScript | C, C++ | Python | HTML | CSS | Assembly
Frameworks	Spring | React.js | Redux.js | Node.js | Sass | Bootstrap JUnit | TestNG | Jasmine Enzyme | WebdriverIO | unittest
Software	Git | SVN | MATLAB | Simulink | Atlassian Tools

PROJECTS

Chess UI - *JavaScript (React, Redux)* *September 2017 - Present*
• Design and program a front-end UI with chess pieces and board layout that can communicate RESTfully to a back-end which checks for valid moves

Robot Arm Control via Bluetooth - *C++* *September 2017 - December 2017*
• Used embedded C++ in a ZedBoard to control the movements of a robotic arm via Bluetooth signals from a Wii remote