Bradlee Harrison

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Languages: Proficient in C, C++, Python, MATLAB | Familiar with C#, Java, Javascript
Technologies: HTML, CSS, SQL, Git, SVN, Linux, Excel, Jira, Redmine
Specializations: Signal Processing | Neural Networks | PyTorch | FPGA Design | Information Theory

EXPERIENCE

Software Intern Dec 2021 - Feb 2023
PCI Energy Solutions Norman, OK

- Collaborated with a team of 10+ professionals to develop and deploy 30+ software features for energy independent system operators using proficiency in Java and SQL.
- Engaged in Agile methodologies, fostering team collaboration. Active involvement in scrum meetings and sprint planning ensured 100% on-time or early completion of 20+ sprints
- Led the analysis and resolution of critical defects in real time energy trading results, enhancing system reliability and ensuring zero downtime by verifying REST API endpoint results and correcting code requesting unit generation schedules from the API
- Orchestrated the management and synchronization of a large codebase with Git and SVN, enhancing branching strategies leading to a decrease in merge conflicts by 40%

Engineer Trainee Jun 2021 - Aug 2021
76th Software Engineering Group - Tinker Air Force Base Midwest City, OK

- Contributed to software maintenance and improvement for the Air Force Civilian Service, using C#, Unity, and TestComplete to develop tests, features, and resolve bugs for virtual mission control, flight, and maintenance software, enhancing system performance and reliability.
- In a two-person team, developed and implemented an automated test program for a simulated circuit board, achieving a 95% success rate in identifying and troubleshooting faults through performance and diagnostic testing methods in our first learning project

PROJECTS

Mars-Style Rover Development | University Competition Team Sep 2021 - Dec 2022

- Managed electrical wiring and system integration of relays, motors, microprocessors, and sensors of a mars-style rover for the University Rover Challenge, contributing to our team placing 12th out of 37 international teams
- Interfaced with a ZED-F9P Multi-band GNSS receiver module using I2C protocol to process satellite data and generate positional coordinates within an accuracy of one meter
- Deciphered and converted complex, machine-generated C/C++ libraries for a GPS device into a more manageable Python library, improving team understanding and future development

MIL-STD-1553 Data Bus to Ethernet Interface | Capstone Project | May 2022 - Dec 2022

- In a team of 4, designed and build an embedded system to function as a MIL-STD-1553 Bus Monitor and Remote Terminal, using C-language firmware to control a HI-1575 transceiver chip
- Configured Linux and input-output system settings for a BeagleBone Black development board
- Implemented a TCP/IP socket connection between a host computer and a BeagleBone Black for efficient data and status word transmission over an Ethernet interface

EDUCATION

University of Oklahoma Norman, Oklahoma
Master's of Science, Electrical and Computer Engineering Expected May 2024
Bachelor's of Science, Electrical Engineering | Cumulative GPA: 4.00 Dec 2022