Jake "JJ" Bowen

(925) 705-5070 | jjb3326@gmail.com| www.linkedin.com/in/jake-bowen |San Francisco Bay Area, CA| jj-bowen.com

Summary

Experienced embedded engineer and automation programmer with a passion for problem solving and a love for simplifying and streamlining complicated processes with creative and efficient solutions.

Education

Master of Science   9/2022
University of California, Santa Cruz | **GPA** 3.82 | **Computer Science and Engineering**

Bachelor of Science   6/2021
University of California, Santa Cruz | **Computer Science**

Bachelor of Art   6/2021
University of California, Santa Cruz | **Economics**

Work Experience

Software Engineer II | RTX Corporation   9/2023-*Present*

- Telemetry expert on an embedded software engineering team. Developed & rigorously tested performance-critical interfaces using modern C++ for aerial control surfaces and sensors on an experimental military project, helping to progress from an early prototype to flight-ready status in less than 4 months.
- Automation specialist on the same team, implemented Python based automation tool and CI/CD pipelines in Azure DevOps for test automation of embedded software, contributing to improved reliability and continuous monitoring of complex, multi-component systems.
- Researched and integrated an Electro-Optical Sensor Model (EOSM) for a digital scene generation team.
- Implemented Continuous Documentation into a CI/CD pipeline as part of a DevOps team.

Information Security Analyst| University of California, Santa Cruz ITS   12/2021-07/2022

- Student job on ITS Core Technology- Infrastructure Security Team, analyzing vulnerabilities and investigating/ responding to incidents at a major research university.
- Worked with open-source projects, vendor APIs, and code with limited documentation and support.
- Focus was on enhancement of security tools, alerts, and data analysis.

Software Engineering Intern | Nuix North America, Inc   10/2020-7/2021

- Created JavaFX application to test native C++ API
- Developed stand-alone application using JavaFX to make and view file safes.
- Created UI layouts with Scene Builder, including associated Controller classes.
- Developed Interface classes to access the native C++ DLL using JNA.
- Used the Java Document class to read and write test configuration files in XML.

Key Skills

- Languages: Java, JavaScript, JavaFX, C, C++, Python, HTML, XML, Ruby, React, Make, SQL, PlantUML, Perl, CUDA, Yaml, Bash
- Software: GitHub, ADS, Microsoft Office, Eclipse, Notepad++, Google Suite, PuTTY, Remote Desktop, Docker
- OS: Windows, Unix/Linux, VxWorks
- DevOps, Automation, and CI/CD Pipelines
- Embedded Programming
- Mobile Development
- Talent for recognizing improvement, and designing creative and efficient solutions
- Experience working with GPU programming using CUDA
- Curious and solutions-oriented problem solver

Research

GPU Programming | University of California, Santa Cruz | 1/2022 – 9/2022

- Researched running graph algorithms, particularly PageRank and Single Source Shortest Path, on CPU, GPU and heterogenous kernels, as well as embedded devices.

Volunteer Experience

Teen Volunteer (TWG) | Oakland Zoo - Oakland, CA | 06/2011 - 09/2017

- Educated zoo visitors about animals, their habits, natural environments, and conservation issues.
- Multiple Presidential Volunteer Service Awards for hundreds of hours of volunteer work.