JORDAN COX

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Technical Skills

Programming Languages

C++, Java, C#, C, Python, TypeScript, hlsl, SQL, HTML, CSS, LaTeX

Development Environments

VS Code, Visual Studio, Spring Tool Suite

Tools & Etc.

Git, Subversion, Jira, Coverity, Microsoft Office, React, Node.js, Unity

Work Experience

SMX Tech — *April 2022 - January 2023*

Fullstack Software Engineer — **Huntsville, AL** ***Remote***

- I worked on a team developing logistics software. I supported the legacy Java application and modern React application.
- For the legacy application, I would create new data types, add them to the database, and perform maintenance to algorithms to utilize the new data. Then I would represent this data in line graphs or tables.
- For the React application, I would build form components that would take user input data and I'd apply algorithms I'd write in Java to that data, then I'd supply the data in a table as a React component.
- The team I worked on would have scrum meetings twice weekly, we used Git for version control, and we would utilize Jira for tracking our tasks, testing, etc.

Leonardo DRS — *February 2020 - August 2021*

Software Engineer — **Huntsville, AL** ***Hybrid***

- I worked on multiple projects for Tanks and Ground Vehicles at DRS, including an Encryption/Validation API in C++, a Serial Downloader in C# (Windows Form application), and a Tank Diagnostics application written in C++ which would lock the user out of the operating system (Windows XP/7).
- I used tools and libraries like Git, Subversion, Jira, Coverity, VMWare, OpenSSL, CMake, GoogleTest, DotRas, RASDial and SiteKiosk.
- I would setup the hardware to house our software, which included installing the operating system, updating the BIOS, setting up the user accounts, and the applications. This sometimes included writing batch scripts.
- I also would work in SIL (Software-in-the-Loop) environments which would simulate an Abrams tank.
- I created and updated documentation for the projects I worked on using Microsoft Office (mostly Word, PowerPoint, and Visio).
- I was an ambassador of the company by interfacing with customers to present design decisions and overall progress on the implementation of software products.
- I also led a couple groups of interns on a project to create an application and database to store weekly status updates of employees for our management during covid.

National Science Foundation — *May 2019 - August 2019*

Undergraduate Researcher — **Auburn University**

- I was awarded the Research Experiences for Undergraduates grant from the National Science Foundation where I researched Cloud Computing infrastructure.
- I helped model different IoT Cloud Computing topologies ranging from large fog to edge computing environments in a software simulation using Java, and then graphed the results using MatLab.
- I also created a posterboard to present my research, and I helped write a research paper in LaTeX.

Personal Projects

Procedural Mesh

- This project is one of several I've been making to teach myself graphics programming using C#, Unity, and High-Level Shader Language (hlsl).
- It procedurally generates a 3D mesh for different shapes, by taking an input resolution and creating a bunch of vertices based on the desired resolution. It then draws a bunch of small triangles between the vertices to create the shapes.
- By tracking the position, normal, and tangent values of each vertex, I'm able to place a texture mapping over the shape, to give it a color and 3D texture.

Education

Auburn University ***August 2017 - December 2019***

Bachelor of Engineering, Software GPA: 3.7 *Magna Cum Laude*

Calhoun Community College **August 2013 - May 2017**

Associate of Science, General Studies GPA: 3.75 *Magna Cum Laude*