Colin Herbert

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Summary

Dedicated problem solver with a diverse software background. Over the last 4 years of schooling and 1 year of work experience I have developed the ability to learn and become proficient in multiple new technologies essential to software development.

Experience

Junior Software Engineer *– Aerial Sphere LLC* June 2023 – September 2023

- Performed development work, pull request reviews, and QA testing across five different codebases.
- Learned and performed responsive web design practices using HTML5, CSS3, TypeScript, Node.js and React.js for desktop and mobile platforms.
- Head developer of C++-based remote camera triggering application designed for use in aircraft.
- Made decisions regarding ticket priority and established new system requirements, wrote thorough documentation on newly implemented features, and exchanged knowledge about the codebase with other developers.
- Designed reusable UI components for flight software utilizing the QT Framework.
- Worked with relational databases through the Django framework in Python. Made queries for use in web applications, created new Django objects, and modified Django admin to accommodate the new object.
- Utilized serial communication and GPIO programming with microcontrollers to invoke camera triggering processes. Worked with a Sony Camera SDK to remotely change camera settings and trigger devices.
- Conducted and recorded retro meetings once-per-month, where feedback from the developer team on previous sprints were collected, discussed, and addressed.

Software Engineering Intern *- Aerial Sphere LLC* May 2022 – June 2023

- Performed ticket work involving bugfixes, performance improvements, feature implementation, and creation of unit tests on a legacy codebase.
- Created and managed software branches using Git with Bitbucket.
- Learned about the company software development lifecycle and tech stack, worked with three different codebases for proprietary tools and flight software.
- Took on independent project developing a Python-based imagery data-processing proprietary tool that stitches and formats imagery to prepare for post-processing. Reduced manual upload time of imagery data by 50%.
- Followed RESTful API principles to access imagery data stored in Django. Tested API endpoints using Postman.
- Collaborated with teams outside of the software department including Sales, Image Processing, and Electrical to receive product feedback and create new system requirements.

Education

The University of Arizona | Tucson, Arizona

Bachelor of Science in Electrical and Computer Engineering / Minor in Computer Science May 2023

GPA: 3.37

Skills

Languages*:* C, C++, C#, Python, Java, HTML5, CSS3, JavaScript (Node, React), PHP, Verilog, TypeScript, MIPS Assembly ***Software****:* Unity Engine, Bitbucket, Excel, MATLAB, SolidWorks, OrCAD/PSpice, MongoDB, SQL ***Tools****:* Jira, Git, Docker, Linux, Bash Scripting, AWS (EC2, CloudFormation, Lambda, S3), Django, PyQt, TensorFlow, Keras, Pandas ***Skills****:* Experience with unit and integration testing. Has worked in an agile workflow. Experience with embedded programming. Reads, writes, and understands software documentation and hardware spec sheets. Understands neural networks and model building in Python.