Brett Alford

Contact Information:

Address: Lago Vista, Texas, 78645

Email: brettalford1@gmail.com

Phone number: 512-507-2896

LinkedIn: brett-alford1

Education:

B.S. Computer Science
Minor in Mathematics
Graduated from Texas Tech December 2024

Programming Skills:

Python, Java, C, Unix Command line, HTML, MySQL, Wireshark, C++, CSS, RStudio, JavaScript, NoSQL, ARM assembly, Git, Verilog

General Skills:

- Well versed in navigation and usage of commonly used interactive developer environments and modern systems such as Visual Studio Code, GitHub, Pycharm, Jupyter Notebook, Windows File Explorer, as well as Microsoft Word, Teams, Outlook, PowerPoint and Excel amongst other Microsoft Office suite programs.
- Trained in technical writing with a primary focus on user manuals.
- Experience with troubleshooting and repair of computer hardware and software.
- Ability to locate and follow manual instructions to solve common issues and errors.
- Well versed in the use of common mathematical concepts.
- Experienced working in both collaborative and independent environments to design, develop, and implement programs within specification.
- Experienced working with teams using Agile development methodologies.
- Capable of soldering and basic electrical schematic reading.

Prior Experience:

- Volunteered at a Public Library, typically either in a customer service role, assisting library members with the use of public technologies, or by operating the phone and managing inventory. I also occasionally supervised community events which took place there.
- While in college I engaged in several team-based projects in leadership and non-leadership roles, working with my team towards completing the tasks we were assigned.

Projects:

- Developed CollaBand as part of a team, a web application designed to provide an environment for collaborative music creation, where multiple users can edit a piece of music simultaneously through the use a Django webserver and PostgreSQL database as well as Socket.io and Redis to handle live transfer of input so that all users can see the piece in a live session.
- Worked in a collaborative team environment to create a database management system for a faux hospital in MySQL which included all the indexes, tables, and triggers which might have been needed for a real hospital to function.
- Designed and created a python program that collects news article data from google and performs sentiment analysis, storing that data into a csv file, and then using the pandas and matplotlib libraries to visualize that data and create a scatter plot with a best fit line to track the trending of positive or negative sentiment over time.
- Programmed and wired Arduino hardware to detect when a door was opened and the event timestamp so that the data could be used to determine periods of high traffic and energy usage.
- Developed a web application named Palatteer that allows the user to generate and customize color palettes for their projects. The first stage of planning was done in Milanote with the website being built in HTML and CSS and JavaScript being used to implement the core functionality of color saving, favoriting, randomization, and the generation of complementary or analogous color schemes.

About me:

- Having recently graduated with a Bachelor of Science in Computer Science and a minor in Mathematics, I am looking for a position and a team where I can apply my knowledge, gain experience, and learn valuable new skills.
- I enjoy working with technology to create solutions for the problems that I see in life, whether it be making a task more convenient or providing a vital service. More than anything else, I am excited at the prospect of seeing something that I have worked hard on come to life.