Joshua Wright

Software Engineer

- Experience -

Co-Founder & Software Engineer – Otternaut (Sandbox SB04) Smart Lead Management SaaS for Home Service Businesses Aug 20XX – Apr 20XX

Built and deployed a cross-platform mobile app (Flutter, FastAPI, Google Maps API) that integrated with the Jobber API to manage real-time customer leads; supported 20+ active users and generated 359 in monthly recurring revenue (MRR).

Led backend development using Docker, PostgreSQL, and OAuth2 authentication; deployed to Hetzner VPS with CI/CD via SSH and Docker Compose.

Implemented deep linking and Firebase hosting for Android/iOS, learning and applying Supabase and advanced data handling under startup constraints.

Collaborated in a 3-person founding team, adapting through pivots; gained firsthand experience in agile development, technical ownership, and startup operations.

Key lessons: importance of aligned team values, clear documentation, and building with user feedback early. Experience inspired the launch of a second SaaS business post-graduation.

- Sandbox SB04 -> Wrote a Mobile App using Flutter, Google Maps API, which sends and receives real-time data from the jobber API.

SSH, Docker & Compose, FastAPI, Flutter, Dart, Python, Deeplinking, Oauth2, DeepLinking, Hetzner VPS.

08-22-24 04-23-25

————————————————

Frontend Engineer – AI-Tutor (UVU Research Project) Custom AI chatbot interface for 300+ UVU students Oct 2024 – May 2025

Developed Version 2 of a Svelte-based AI chatbot UI deployed for UVU students and faculty, enabling real-time access to course materials, grades, due dates, and instructor feedback.

Engineered streaming response handling using regex-powered chunk parsing for KaTeX and code blocks; solved complex rendering, scrolling, and formatting edge cases.

Collaborated with a 3-person team (tech lead, PM, and professor of Technology Management) in an officially sponsored university research initiative.

Integrated frontend with a FastAPI backend using OpenAI's API; designed for secure student data access via Canvas-authenticated browser extension.

Project reached 300+ users; demoed to faculty and prepared for full V2 deployment across UVU.

ai-tutor -> Created a custom chatbot interface for UVU students with access to course material, due dates, grades, and submission comments. The interface displayed code blocks, katex, and real-time rendering of streamed responses.

Svelte (JavaScript, HTML, CSS). 10-20-24 05-10-24

————————————————————

Automation Engineer – System8.ai / Elysium RIA Automated Financial Data Retrieval from Bloomberg Terminal Mar 2025 – Present

Designed and deployed a Windows installer using PowerShell, batch, VBScript, and Excel macros to automate daily export of ETFs, currencies, futures, and macroeconomic indicators from Bloomberg Terminal.

Scheduled nightly data pulls at 6 PM for Elysium's owner, replacing a slow, manual process used multiple times daily—streamlining dashboard updates, backtesting workflows, and downstream integrations.

Built with robust error logging and sandbox-tested in a restricted (no-admin) environment, requiring creative scripting and deployment workarounds.

Used Excel add-in, Google Cloud CLI, and integrated cross-platform scripting to support scalable financial research used across Elysium's investment platform.

Windows Installer -> Wrote a windows installer for a Return Investment Advisor which automated the data retieval of real-time financial data from the Bloomberg Terminal.

Powershell, Batch script, iexpress, excel, Visual-Basic Script, Bloomberg API, 03-25-25 current

Currently under Development Command line tool that lists all files and directories and opens files in your editor of choice, or changes the directory.

05-12-25 current ——

Frontend Developer – UVU Excellence & Innovation Initiative (E2i) Team-Building App Powered by LLMs and Qualtrics Data Jan 2025 – Apr 2025

Built an interactive frontend in Streamlit for a team-matching platform that auto-generated 50+ project teams using LLM-driven analysis of Qualtrics survey data and employee profiles.

Developed a dynamic editable modal with search and removal functionality, enabling users to fine-tune AI-generated teams before committing selections to the database.

Enabled project organizers to define goals and constraints, allowing the LLM to recommend optimal team structures, roles, and members based on real-time inputs.

Supported the distribution of 500,000 in grant funding used to incubate student-led ventures and contract-based software development for real businesses.

E2i -> On a team of 4 developers that built a team building Application using LLM's & Qualtrics Data to Automatically create 50+ teams handled 500,000 of grant money. ——————————

Volunteer Representative – The Church of Jesus Christ of Latter-day Saints, Kiribati Mission Jan 2018 – Dec 2019

Served 24 months in a full-time volunteer capacity, teaching, organizing community events, and providing service across the Pacific island nation of Kiribati.

Developed strong cross-cultural communication, adaptability, and leadership skills while working with diverse communities in challenging environments.

Led group discussions, trained new missionaries, and participated in humanitarian initiatives to support local needs.

LDS Mission in Kiribati Mission Volunteer Representative 01-10-18 12-16-24

——————— Sales Representative – Grit Marketing Apr–Aug 2021, May–Aug 2022

Sold 126,000 and 167,000 in pest control services during consecutive summer sales programs across six states.

Closed 174 and 232 paying, serviced customer contracts in 2021 and 2022, respectively, through direct door-to-door outreach.

Honed persuasive communication, objection handling, and territory management skills in a high-performance, commission-based environment.

Ranked among top performers while adapting sales approach to diverse regions and customer demographics.

Grit Marketing Door-to-Door sales selling pest control in 6 states. 04-24-21 08-15-21 05-04-22 08-21-22

——-

Hobbies & Interests

Fitness & Athletics: Training for a natural bodybuilding competition; former high school cross-country runner; member of UVU Club Soccer Team.

Outdoors & Adventure: Avid hiker—currently completing all major mountain summits in Utah; enjoy long motorcycle rides.

Tech & Side Projects: Passionate about coding outside of work—frequently building tools and apps to improve workflows, automate tasks, and explore new technologies.

Additional Leadership Experience

Student Body Officer – [High School Name], [City, State] Elected representative all 4 years of high school; served as Student Body Officer senior year, helping plan school-wide events and represent 1,200+ students. Hobbies - Lifting Weights (training for a natural body-building show), Running (XC in HS), Motorcycle, Soccer(University Club Soccer Team, Hiking (Finishing all the major mountains in Utah this summer), Coding(Maybe mention pet projects here?)

UVU Mathematics Tutor 01-20-23 10-20-24 Calculus Supplemental Instructor 6 months. 08-05-23 12-16-23 UVU Computer Science Club Chairman 08-05-24 04-20-25

Education Utah Valley University — Orem, UT Bachelor of Science in Computer Science, Minor in Mathematics Graduated Apr 2025 Academic & Leadership Involvement Eagle Scout

UVU Computer Science Club – Chairman Aug 2024 – Apr 2025 Organized events, led weekly meetings, and coordinated with faculty and local tech companies to support over 80+ CS students in networking and skill-building.

Calculus I Supplemental Instructor (SI Leader) Aug 2023 – Dec 2023 Led weekly review sessions and created custom lesson content to support 100+ students in mastering foundational calculus concepts.

Mathematics Tutor – UVU Academic Tutoring Services Jan 2023 – Oct 2024 Tutored students in algebra, trigonometry, calculus, and discrete math with an emphasis on deep conceptual understanding.

Our startup’s name was Otternaut, and it was a smart leads management tool for home service businesses. The purpose was to obtain and nurture leads so that they could be made into customers.

We did have a demo day and had 359 of MRR when I left. The thing is that I felt like a lot of the success was due to my group and I was working on things on the side that never ended up being utilized because we kept pivoting away from what I was building. However I learned a whole heck

of a lot as a result of this project and really did put in a lot of time and effort into trying to make it successful and think that I could do much better this time around.

We worked on this from August-April. I was the mobile and backend dev for the project (so engineer and founder). We had over 20 active user using our service when we left. The other thing is that the group continued working on this project past graduation and I left.

I learned the importance of working on a team in which you respect eachother and have similar goals/values. I also learned the importance of good documentation for our code as our documentation was terrible. I learned how all of the technologies listed above as well as postgresql, supabase, hosting on firebase, Android and Ios development.

It has also inspired me to start my own business with my friend after doing so. He and I have started a website freelancing business and are now creating a business that will move businesses off paper and excel to a database with analytics and easy querying.

The software had over 300 student users. This was a job for the college. On our team was myself (an engineer), a tech lead, and a product manager. We were working under a professor of Technology Management as a research project. Yes we had small demos to professors in the Technology Management Department and our software was deployed for all of UVU students and teachers to use. The catch is that I was working on V2 of the frontend, which is going to be deployed very soon but has not yet.

OpenAI's API was powering the chatbot with a FastAPI backend (although I did not write code for the backend). The frontend would send post requests to the backend, which would send other relevant student information to the ai-model. The backend would then catch and resend the stream as it was receving it to the frontend, which would recieve the stream chunk at a time and parse and display it properly.

The Backend (that I did not work on handled all of the authentication by sending cookies from a browser extension to the user who had to be logged into their canvas student portal in order for the tutor to work.

The most challenging part was handling the streaming response, from recieving the data piece at a time (sometimes multiple chunks at a time), and applying the correct regex to them according to the katex and code parsing needs. Katex was very difficult to get to consistently render properly and the code blocks would often have improper syntax sent to me by the llm that I would have to fix. There were many edge cases to handle with all of the parsing. Also the automatic scrolling and stopping was difficult to figure out.

The RIA firm's name is called Elysium, and has offices in Arizona and Utah. I am still working for System8.ai, which is likely going to get swallowed by Elysium and we will all soon start working for Elysium. There are 2 other members that I am working with at System8.ai, although I have been the one handling the part of the operations which I have handled above.

System8.ai is a new startup and does work for hire.

The daily export of prices from the bloomberg terminal is being pulled automatically and is scheduled to run every night at 6pm on Ryan's computer. (He is the Owner of Elysium.)

This removes several minutes every time Excel Spreadsheets is open (which is multiple times a day) and removes (Having to open the bloomberg terminal and excel, waiting for the data on all the sheets to load, copy-pasting the most recent rows into other programs, and needting to remeber to load this daily. It is also much much faster, has an improved dashboard for viewing, and is easily integratable with other services, easy to expand upon and backtest.

The installer will get used once, but the automation that it performs will be run daily. It is pulling ETF's, Currencies, Futures, and other macro indictator ticker symbols (based on 42 macro).

This is yet to be used by the elysium team but will be used by Ryan daily to provide the entire platform with the data that will be used to analyze the stock market. So The other members of the team will be able to use the data once it is collected as well.

Used the Excel add-in and google-cloud-cli. Also used vbs macro inside excel sheet and all this was done in ps1

The installer has error logging built-in, and the process has error logging as the process is performed daily.

All this was done by testing on a school computer without Administrator rights, which made the whole process much trickier and required many work-arounds for testing and creating a working model.

the excellence & innovation intiative at UVU. The app took the survery results and converted these into metrics used to create teams.

The LLM was used to ask the team creator for specifics on the projects in order to recommend the correct size of the team, correct team members, and best suited roles according to the database of employess and algorithm given to the ai.

I was working with python and steamlit specifically. My job was to trigger an editable table modal on the screen when the ai had enough information to create a team. This modal would then allow the user to edit the team (with a search bar for e2i employees) and removable team members. It would then send the selected team to the database once the user OKed the the team.

I was I frontend Dev on the team.

The 500k was used to fund e2i projects - of either business ideas students had or to pay students to develop software and other tech for real businesses (kickstart contract based work)