Will Hamilton

william_hamilton@me.com | foshesuniverse.com

EDUCATION

University of Maryland — College Park, MD

B.S. in Information Science w/ specialization in Data Science

Notable Coursework: Dynamic Web Applications, Data Science Techniques, Calculus (I, II, & III), Linear Algebra

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, C, C++, Java, SQL, Elixir, Go/Golang, Lua/Luau

Developer Tools: Git, Azure Cloud, Docker, MongoDB, MySQL, ReactJS, NextJS, Vue.js, Postman

EXPERIENCE

Gameplay Engineer — September 2024 - Present

Fullfire Studio — *Remote*

- **Tools & Tech:** Luau, Python, GSheets, JSON
- Created an on-boarding process that allows players to familiarize themselves with game mechanics.
- Developed a pipeline for exporting and importing all game items into a Google Spreadsheet, for ease of balancing.
- Communicated with QA testers to diagnose and fix bugs encountered during testing sessions.

Software Development Engineer Intern — May 2023 - August 2023

Zillow — *Seattle, WA (Remote)*

- **Tools & Tech:** Python, TypeScript, Trino, OpenAI API, Vue.js, Prompt Engineering, Vector Databases
- Developed a chatbot utilizing OpenAI's API that offers instant business insights based on user-inputted questions.
- Implemented a back-end API with Python and a front-end web interface with TypeScript and Vue.js.
- Engineered custom prompts for GPT that created Trino queries from natural language user requests.
- Enhanced data interpretation by leveraging statistical analysis and prompt-engineering on retrieved data.
- Assigned to lead the project, onboard developers, discuss use-cases, and define future goals.
- Won the Zillow Hackweek in July 2023 with this project, working with 30 other developers.

Software Engineer Intern — May 2022 - August 2022

TeleTracking Technologies — *Pittsburgh, PA (Remote)*

- **Tools & Tech:** Golang, JavaScript, SCSS, ReactJS, YAML
- Developed a log adjuster application using Golang as the back-end and JavaScript (ReactJS) as the front-end.
- Optimized developer workflows by eliminating extraneous steps of the development process.
- Reduced logging overages by creating a helpful, user-friendly interface to display Spring Boot service logger levels.
- Participated in the entire lifespan of an application; design, development, presenting to SLTs, and deployment.

Research Assistant — June 2024 - Present

University of Maryland School of Public Policy — *College Park, MD*

- **Tools & Tech:** Python, PRAW, Web Scraping
- Conduct research to support National Science Foundation funded investigation to track trends in opioid markets.
- Collect and analyze quantitative and qualitative data through web scraping and data from government databases.
- Applied data science principals.

Undergraduate Research Assistant — March 2023 - May 2023

Applied Research Laboratory for Intelligence and Security — *College Park, MD*

- **Tools & Tech:** Python, XPath, Web Scraping, HTML, JavaScript
- Acquired data from websites using web-scraping scripts for a government-sponsored language research program.
- Ensured the quality of human subject data, verifying that the corpus was free of GPT and LLM generated content
- Created multi-corpus datasets for AI/ML training pipelines, sourcing thousands of docs from genre-specific sites.

PROJECTS

Game Item Database | *Azure, Python, TypeScript, SQL, Luau, FastAPI, React* — October 2023 - September 2024

- Developed a React website to accommodate a player-based economy through real-time item analytics.
- Deployed a RESTful API for real-time tracking and retrieval of in-game item information and quantities.
- Hosting both frontend website and backend API through Azure Container Apps with a custom Docker images.