Stephen Wallen

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SUMMARY

Delivering automated solutions for 2+ years with full-stack applications. 4+ years of Flutter development.

WORK EXPERIENCE

Full Stack Developer: Flutter @Google

Jul 2022-Feb 2023

- Developed CLIs, designed APIs, and supported Flutter on macOS with AppKit and Objective-C.
- Observed UX research, developed packages, authored tutorials and examples for adaptive Flutter apps.
- Brought up physical hardware benchmark tests to mitigate performance and memory regressions.

Full Stack Developer: e-manage | ONE Mobile @Marketplace Software

Jan 2021-Oct 2022

- Improved throughput and reduced code complexity by writing C# source generators that produced RESTful micro-services, reducing existing code by 42% while adding 197,000 lines of boilerplate.
- Developed and maintained a cross-platform codebase, CI, and CD pipelines that deploy a Flutter app to the App Store, Google Play Store, and Web, supporting over 150 users paying \$70 per-month.
- Refactored a legacy, in-house identity/authentication provider to a token-based identity system.

Software Engineer: Tableau @Salesforce

Jun 2021-Sep 2021

- Resolved *P*0 security vulnerabilities in C++ libraries and increased language support for 90+ regions.
- Automated C++ wrapper code production with Python scripts saving 3 days of toil per invocation.
- Developed heuristics to detect differences in sorting between two Unicode collation algorithms.

PROJECTS

American Stock Market Predictions with NLP: HackSU 2022, 2nd place - Project Manager Feb 2022

A Python program that analyzes financial news, to predict investment growth using NLP

• Deployed timer-triggered functions to Azure that scraped financial news from the AlpacaAPI with Beautiful Soup 4 and generated sentiment analysis reports with Python's NLTK framework.

Lecture Dictionary: HackSU 2020, 2nd place - Project Manager

Feb 2020

A Python program that transcribes microphone audio to text in real-time and provide dictionary definitions.

 Won "Best use of Data Structures" at HackSU 2020 by caching dictionary definitions from the Oxford API with a trie and buffering real-time audio transcriptions with a queue.

Prophet Systems: NASA Space Apps, Global Nominee - Front End Developer

Oct 2019

A web application that visualizes dust concentrations and mitigates the risks of lunar exploration.

• Won the regional "Dust Yourself Off" category in the 2019 NASA Space Apps Challenge by visualizing lunar dust concentrations with HTML, CSS Javascript and was nominated as one of ten global finalists from a pool of 2296 remote participants.

EDUCATION

Seattle University – Seattle, Washington

■ B.S. in Computer Science, Minor in Mathematics

Sep 2018 – Jun 2022

Coursework

Software as a Service, Compilers, Network Programming, Artificial Intelligence, Algorithms & Data Structures

LEADERSHIP EXPERIENCE

Seattle University ACM

May 2019 – current

President 20'-21' | Diversity Chair 19'-20' | Undergraduate Representative 21'-22'

- Founded a 'Personal Projects Showcase' where student teams create projects and present to professionals.
- Spearheaded the "Hacking Labs" initiative; P2P classes with interactive programming experiences.
- Doubled yearly enrollment and maintained 80% satisfaction per meeting.

SKILLS

Programming Languages:

C++, Python, Dart, C#, Rust, Typescript, Flutter, Angular, HTML5, CSS, MySQL, F#, Mocha, Chai, Objective-C, Swift.

Programming Tools:

Bash, Git, Docker, Selenium, MongoDB (Mongoose), Node.js (Express), Visual Studio Unit Testing, MySQL Workbench, Xcode, lldb, AppKit.

Techniques and Skills:

Linux, Network Programming, Concurrent Programming, Mobile & Web Development, Web Scraping, Project Management.