

mattwilki17@gmail.com | mattwilkinsonn | mattwilkinsonn

Summary \_\_\_\_\_

Languages Typescript • Python • Rust • Java • Go • Dart • C • SQL

**Technologies** Docker • Github Actions • Gitlab CI/CD • GraphQL • FastAPI • Express • React • Flutter • WebAssembly

Databases PostgreSQL • MongoDB • Elasticsearch • Redis AWS Services ECS • Kinesis • EC2 • S3 • Lambda

Education

American University Washington DC

**B.S. COMPUTER SCIENCE** 

• GPA: 3.88, In-Major GPA: 3.98

• Minor: Finance

**Work Experience** 

Google New York, NY

SOFTWARE ENGINEER 03/2022 - Present

• Full Stack Engineer on the Google Sheets team, working on the Connected Sheets feature.

**Roku** Remote

 SOFTWARE ENGINEER
 09/2021 - 03/2022

- · Full Stack Engineer developing internal development tools for RokuOS firmware and application teams.
- Conceived, designed, and developed full-stack web & CLI applications to support RokuOS' migration from Perforce to Git.
- Tools handle extensive use of the Git submodules feature, combining parent and submodule repositories from multiple GitLab installations into a single reusable API.
- Combined & Refactored existing Python scripts used by single team members into a convenient CLI application used widely by the organization.
- Wrote and implemented team-wide code tooling, review standards, and CI checks to raise the quality bar of new and existing projects.
- Using GitLab CI/CD Pipelines, as well as the new AWS CDK to automate the building, testing, and deployment of all services.

**Roku** Remote

DEVELOPMENT TOOLS ENGINEER INTERN

05/2021 - 08/2021

08/2018 - 12/2021

- Full Stack Engineer working on internal development tools for the RokuOS firmware teams.
- Rebuilt mission-critical CI build monitoring application using modern web technologies: Next.js, FastAPI, React, Typescript, Python and GraphQL. Led to a 67% increase in developer satisfaction with the tool.
- Ported existing code review tool from Perforce implementation to Git & Gitlab, using Next.js.
- Designed & Developed build metadata storage pipeline, as well as metrics dashboards to analyze the data, using AWS Lambda, Elasticsearch, and Kibana.
- Implemented Gitlab CI/CD Pipelines for all projects to automate the testing and deployment of the applications onto AWS Elastic Container Service.
- Used Terraform to create all cloud infrastructure on AWS.

American University Washington, DC

RESEARCH ASSISTANT

Developed fullstack web application from the ground up, utilizing modern web technologies.

- Application runs hybrid study/games that enable researchers to learn about children's learning habits, as well as a Citizen Science platform enabling others to contribute to research. Worked with researchers to implement their vision.
- Designed & Implemented AWS cloud infrastructure for the application.

## **Projects**

## **Twitter Analytics Service**

Software Engineering Course

PRODUCT OWNER & LEAD DEVELOPER

08/2020 - 12/2020

10/2020 - 05/2021

- Elected Product Owner by fellow group members. Led the design, development, and deployment of the service.
- · Completed service processes streaming data from the Twitter API, and takes analytics requests from the client on various engagement metrics.
- Containerized data pipeline, built with microservices, processes more than 6.5M Tweets per day.