

Mark Wiggans

mmw125@gmail.com ◊ New York, NY ◊ (434) 987-5803 ◊ markwiggans.com

PROFESSIONAL EXPERIENCE

VIRTU FINANCIAL

Software Engineer - Typescript Full Stack

New York, NY

July 2022–Present

Drive best practice adoption on and optimize operations of a typescript middleware application

- Ran a website creation project through collecting requirements from clients, requested necessary apis from backend teams, hosted weekly standups with stakeholders, and built the website in Typescript React
- Rewrote database connector reducing the number of necessary connections by 90%
- Built schemas and Ajv validators for config json files and incorporated them into git hooks with Husky
- Restructured Lerna monolith repository so that its underlying applications could be deployed independently
- Implemented Playwright integration tests after working 1:1 with users to observe workflows

GOOGLE

Software Engineer III - Java Backend

Pittsburgh, PA

Feb 2018–July 2022

Designed and implemented low-latency stubby apis in Java while monitoring uptime and handling outages

- Used A/B testing to ensure safety when migrating a C++ frontend between Java backends
- Wrote custom load tests to ensure SLAs compliance and scalability of a client's backend
- Managed multiple server stacks; allowing for different testing conditions
- Handled coupon generation and redemption in a 5-figure Google Shopping promotion
- Wrote and monitored integration tests for frontend and backend servers with Selenium
- Convinced stakeholders then executed automating server releases from a manual QA-based process

GOOGLE

Software Engineer - Intern

Pittsburgh, PA

Summer 2016, Summer 2017

- Integrated with the Search Ads team to develop and deploy sampling, visualization, and statistical tools for understanding embedding layers of superscale deep neural networks trained in TensorFlow
- Developed Colaboratory dashboards with iPython, Dygraphs and Pandas to visualize machine learning data models using after manipulation in Pandas

REINVENTING GEOSPATIAL

Software Engineer - Intern

Fairfax, VA

Fall 2016

- Created database models for map cache and proxy for transition from CherryPy to Django
- Added a linter and code coverage calculations onto builds and managed testing infrastructure

EDUCATION

VIRGINIA TECH UNIVERSITY

Bachelor of Science in Computer Science, *magna cum laude* (GPA: 3.64/4.0)

Blacksburg, VA

Sep 2013-Dec 2017

PERSONAL

STOCK VIEWER github.com/mmw125/stocks

- Flask Python app that displays annual return percentages from selling options
- Pulls stock and options data from the TD Ameritrade API

FIRST ROBOTICS MENTOR

- Assist FIRST Team 743 with design, programming and electronics

Bronx, NY

Winter 2024

SKILLS

- Java, Python, C++, Android, Pandas, git, Typescript, React, Playwright, Teamcity