

Experience

FEB. 2023 - PRESENT

Lead Full-Stack Engineer - *Buildaible, Fredericksburg VA (Remote)*

- Designed a multi-tenant SaaS in Django using PostgreSQL schemas, supporting dozens of B2B tenants with secure data isolation, reduced infrastructure overhead, and simplified deployment at scale.
- Architected and deployed containerized backend and frontend services using Kubernetes, Helm and GitHub actions, enabling scalable, repeatable deployments across staging and production environments.
- Led development of essential platform features, coordinating with stakeholders and guiding critical architectural decisions while maintaining codebase quality with tools like ruff and pre-commit.

JUN. 2021 - JAN. 2023

Full-Stack Engineer - *Synctivate, Fredericksburg VA*

- Designed and built custom web applications and RESTful APIs using Django, Flask, and FastAPI.
- Led refactoring of a large-scale Python application for a Fortune 500 company, increasing the rate we shipped new features, implemented CI/CD pipelines to turn manual deployments into automated ones.
- Developed an open-source Python SDK (Q-JAC, hosted on GitHub) for the QuickBase platform, providing an ORM for python-based applications and services that use QuickBase as a data store.

NOV. 2018 - JUN. 2021

Full-Stack Engineer - *Shenandoah Research, Fredericksburg VA*

- Developed, component-driven frontends using React, Next.js, and TypeScript, supporting complex user workflows with efficient state management, API integration, and optimized rendering performance.
- Designed and built data aggregation pipelines using MongoDB and Redis, supporting real-time and batch processing workloads with low-latency data access and efficient transformation of large datasets.
- Architected and deployed a distributed microservices-based equity trading platform, utilizing Docker and GitLab for CI/CD and Prometheus/Grafana for observability and system reliability.

Research

- **Publication:** Justin Mittereder, Robert S. W. Carroll, Brandon Frulla, Stephen Davies. (2021) *Exploring the Impact of Social Network Density and Agent Openness on Societal Polarization*. Conference of The Computational Social Science Society of the Americas.

Education

AUG. 2019 - DEC. 2021

The University of Mary Washington - Fredericksburg VA
Bachelor of Science in Computer Science; **GPA: 3.9**

- ACM Vice President | 1st Place UMW Hackathon & Coding Competition