

## EXPERIENCE

---

### • Bridgewater Associates

*Security Engineer*

Westport, CT

June 2018 - Present

- **Iris**: is an insider threat investigation tool I designed and built.
  - \* Developed a graph analysis tool set utilizing a hybrid GraphQL API with and Flask and Amazon RDS
  - \* Built an AWS based secure CI/CD pipeline with static code analysis using SonarCloud
  - \* Designed and developed a performant React frontend to visualize complex graph data
  - \* Integrated with Azure Active Directory to provide Enterprise-grade SSO
- **Policy DB**: is a proxy configuration engine for tracking the lifecycle of policy exceptions I designed and built.
  - \* Improved the efficiency of year-end audits with a temporal data architecture
  - \* Integrated the policy configuration engine with RSA Archer to deliver real-time risk monitoring
  - \* Built a React frontend backed by a GraphQL API
  - \* Designed highly fault tolerant multi availability zone AWS architecture with RDS and Fargate
- Built proxy health Splunk dashboard with Selenium and PagerDuty
- Built operations automation platform with Rundeck and Ansible
- Designed a secure code promotion pipeline with Gerrit and on-premise Bitbucket
- Automated Qualys maintenance tasks

### • Consulting

*Application Engineering*

Tampa, FL

October 2017 - June 2018

- **Mad Mobile Concierge**: is a leading MPOS solution used globally by Brooks Brothers, Vans, and The North Face.
  - \* Developed a GDPR compliant analytics system for React and Mixpanel
  - \* Modernized and refactored a large-scale React application introducing the Redux paradigm
  - \* Integrated Sentry.io to increase defect awareness and reduce remediation time
  - \* Designed a defect remediation process and provided training
  - \* Lead adoption of Test Driven Development (TDD) to slash regression rates across entire portfolio
- **ID Plans Remote Property Manager**: is a real-estate management portal used by property managers nationwide.
  - \* Developed a highly scalable, SVG rendering system in Ember
  - \* Migrated monolithic on-premise infrastructure to AWS based micro-services seeing downtime cut in half

### • SentinelSix

*Full Stack Engineer*

Columbia, SC

June 2017 - October 2017

- **Guardian Angel**: is a global personnel security solution adopted by multiple Fortune 100 companies
  - \* Built a real-time geospatial tracking dashboard with React and Postgres
  - \* Built a multi-tenant user management system with React and MongoDB
  - \* Built performant cloud-first geospatial data ingestion endpoint, using Go and Postgres

### • TCube Solutions

*Software Application Developer*

Columbia, SC

April 2016 - June 2017

- **JIRA Project Kickoff**: is a tool for creating projects and assigning tasks based on requirement templates. I built a plugin to automate project kickoff by creating and assigning JIRA tasks through the JIRA API
- **Blockchain R&D**: Researching new technologies and designing prototypes for use in insurance
  - \* Explored blockchain potential for the insurance sector
  - \* Prototyped and demoed a distributed insurance market

## PROJECTS

---

- **Futurecast**: is a long-term financial data generation and exploration toolkit I built to codify my financial decision making logic. Futurecast was designed and built to improve decision making efficiency and accuracy.
- **SkyFlix**: is an offline in-flight entertainment system designed for plug and play use on private jets. SkyFlix is in use by many customers most notably Air Force 1.

## PROGRAMMING SKILLS

---

- **Languages**: JavaScript, Python, Rust, Go, Swift, SQL
- **Databases**: MongoDB, Amazon Aurora, Postgres, Neo4j
- **Technologies**: GraphQL, Terraform, Protobuf, Selenium
- **Frameworks**: React, React-Native, Express.js, Apollo, Jest, Ava, Flask, Expo, Electron, ARKit
- **Paradigms**: TDD, Functional, OOP, Microservices, Infrastructure as Code, Cloud Native
- **Software**: Jira, Splunk, Qualys, RSA Archer, Active Directory, Gerrit, GitLab, Rundeck, PagerDuty