Jacob Sansbury

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## EXPERIENCE

Security Engineer

## • Bridgewater Associates

Westport, CT

June 2018 - Present

- Iris: is an internal graph analysis tool I designed for incident response and insider-threat workflows.
  - \* Engineered a graph analysis application 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
  - \* Engineered a performant React frontend to visualize complex graph data
  - \* Designed highly fault tolerant AWS infrastructure with RDS and Fargate
- o Policy DB: is a proxy policy configuration engine designed to track the lifecycle of a policy exception and enforce configuration across multiple proxy providers.
  - \* Implemented a temporal database architecture with Amazon Aurora to improve the quality of year-end policy audits

• Consulting Tampa, FL

Application Engineering

October 2017 - June 2018

- o Mad Mobile Concierge: is a leading MPOS solution used globally by Brooks Brothers, Vans, and The North Face.
  - \* Developed and integrated a GDPR compliant analytics system in React
  - \* Modernized 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 system used by property managers nationwide.
  - \* Developed a highly scalable, SVG rendering system in Ember
  - \* Doubled performance on a large Ember frontend app
  - \* Migrated monolithic on-premise infrastructure to AWS based micro-services

 SentinelSix Columbia, SC

Full Stack Engineer

June 2017 - October 2017

- Guardian Angel: is a global personnel security solution adopted by multiple Fortune 100 companies
  - \* Implemented AWS based CI/CD pipeline with Docker Cloud and Codebuild
  - \* Built a real-time geospatial tracking dashboard with React and MongoDB
  - \* Built a multi-tenant user management system with React and Postgres
  - \* Built performant geospatial data ingestion endpoints, using Go and Postgres
  - \* Recruited and trained 3 interns through partnership with local high schools

• TCube Solutions Columbia, SC

 $Software\ Application\ Developer$ 

April 2016 - June 2017

- 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
- o 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

## 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: Python, JavaScript, TypeScript, Swift, Go, SQL Cloud Providers: AWS, Azure, Herkou
- Technologies: GraphQL, Rest, MongoDB, Amazon Aurora, Postgres, Terraform, Neo4j
- Frameworks: React Native, Express, Flask, Expo, Webpack, Electron, UIKit, ARKit,
- Paradigms: Cloud Native, TDD, Functional, OOP