Email: jacob@workbyjacob.com Full Stack Engineer Mobile: +1-803-445-3351

EXPERIENCE

NVIDIA GeForce NOW

San Francisco, CA

Senior Software Engineer

- September 2020 Current
- $\circ\,$ Owned two quarter-long projects end-to-end (more details in sections below)
- Hired and mentored three winter interns, all three received "top 10%" during annual reviews
- Lead ten-part cross-team educational series on Advanced Typescript Development for 30+ engineers
- Implemented cross-team process for code promotion across three products to coordinate QA and product engineers

GeForce NOW Survey Engine:

- * Enabled segmented feedback collection for one-million MAU through platform-native survey experiences
- * Designed survey-engine for iOS, Android, Mac and Windows with full support for 50 languages
- * Built user segmentation engine to target users matching over 300 real-time attributes
- * Developed native client integrations with React and React Native for iOS and Android, Windows and Mac
- * Delivered survey-design portal for internal customers and game publishers to design custom surveys

Saleae Inc. San Francisco, CA

Full-Stack Software Engineer

November 2019 - March 2020

- Reduced single-frame render time by 50% for a mixed-signal oscilloscope rendering system in C++ and React (TSX)
- Led migration to MobX from Redux state management across a team of engineers

Bridgewater Associates

Westport, CT

Columbia, SC

Security Software Engineer

June 2018 - November 2019

- Engineered a set of 3 threat investigation tools with Go and Rust to mitigate insider threat attack vectors
- Engineered a Go GraphQL backend interface to access millions of graph nodes and relationships persisted in Neo4j
- o Built a WebGL Graph rendering system for hundreds of thousands of nodes and edges in React
- o Architected and built AWS infrastructure to process terabytes of graph data per week
- Improved critical infrastructure visibility by 90% though new network visibility tooling

Mad Mobile Tampa, FL October 2017 - June 2018

Software Engineer SentinelSix

Full-Stack Developer June 2017 - October 2017 **TCube Solutions** Columbia, SC

April 2016 - June 2017 Software Application Developer

Projects

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Quantitative Securities Trading System (TiSh):

- o Built a performant, event-sourced data pipeline for backtesting and fault-resistant live-trading with Python
- o Optimized and validated trading strategies with backtests utilizing >700,000 minutes of historical trading data
- Designed and deployed AWS infrastructure to actively manage >\$50,000 of personal capital

Eyelang: A dynamically typed interpreted language with an english-like grammar

Switch CMS: Switch is a modern alternative to out of date and costly cabin management systems

o Created a device controller capable of reverse engineering aircraft CAN bus signals to discover device control commands in C++

SKILLS

Languages: TypeScript, Python, Rust, Go

Frameworks: React, React Native, Angular, SwiftUI, Flask, Tensorflow

s Cloud Technologies: AWS, Azure, Heroku, Firebase, Kubernetes, Docker

Databases: MongoDB, AuroraDB, Postgres, Neo4j

Standards: GraphQL, REST, SOAP, TCP/IP

Software: Jira, Splunk, RSA Archer, Active Directory, Gerrit, GitLab, Rundeck, PagerDuty, Qualys