

Andrew Anthony Gerst

Senior Software Engineer (Full-Stack)

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- I am extremely self-motivated and eager to work and you won't regret giving me a chance!
- I was Checkr's 4th engineer working on international expansion and rapidly scaling our team!
- I was Passport's 5th engineer contributing to every single functionality of the platform imaginable!

Skills

Main: Ruby, Node, JavaScript, TypeScript, React, Python, Go, MySQL, Postgres, Mongo, Redis, Kafka, AWS, Swift

Experience

Senior Software Engineer – [Checkr](#) | Background Check Platform

February 2021 - April 2024

Major Product Enhancements

- Led the creation of multiple new screenings that expanded our product capabilities
- Led the implementation of Amplitude analytics that significantly improved our product insights
- Created a Ruby on Rails platform that dramatically reduced the complexity of building new screenings
- Reduced developer frustration and technical debt by unifying multiple divergent products
- Improved candidate experience by removing the need to print and fill out PDF documents
- Improved screening TAT by creating jobs that monitored and resolved stuck workflows
- Created Datadog monitors and Snowflake dashboards to improve observability
- Mentored our summer interns and helped lead their project to completion
- Many other things including React/TypeScript front-end projects...

Improved Developer Productivity (Above & Beyond My Role Responsibilities)

- Reduced the time 50+ engineers spent onboarding from weeks down to hours
- Created scripts to set up and run multiple services in a local dev environment
- Ensured a smooth transition from Intel to ARM based MacBook architecture
- Created scripts automating workflows that required manual interactions
- Created Bash shell scripts to ease the administration of our Kubernetes clusters
- Created Ruby Thor scripts that automated various on-call support tasks

Senior Software Engineer – [Brainbase](#) | Intellectual Property Platform

May 2020 - September 2020

Containerized services for Docker and made improvements to both our frontend (Angular) and backend (PHP/Laravel)

Senior Software Engineer – [Passport](#) | Mobility Software Platform

December 2013 - April 2020

Modernized & Scaled Architecture

- Led the creation of a Node/TypeScript platform enabling integrations with our public API
- Migrated our legacy PHP monolith to microservices using AWS Lambda and Node/TypeScript
- Migrated our databases from MySQL to DynamoDB for improved performance
- Migrated our web apps to React/TypeScript and our iOS apps to Swift

Promoted A High-Performance Culture

- Interviewed candidates for roles up to VP of Engineering
- Evaluated programming challenge submissions from candidates
- Streamlined our onboarding process via documentation and automation
- Created many tools enabling new ways for engineers to work more efficiently
- Mentored peers and was a highly available, trusted source for advice and pair programming

Core Business Expertise

- Lead maintainer of our Python rate engine, a critical component for facilitating payments
- Built custom mobile and web apps for 20+ of our high-volume clients in a scalable way
- Implemented third-party integrations to satisfy RFP requirements to win new clients
- Added i18n support in our apps so that we could expand to markets internationally
- Built integrations with our in-house PCI-compliant payment gateway service

Additional Accomplishments

- Developed the legacy monolith system using Python, PHP, and MySQL
- Developed the legacy mobile apps using Titanium and Java
- Developed the legacy web apps using jQuery and GWT/Java
- Developed the legacy strings system to handle internationalization
- Maintained the iOS Swift apps through multiple Swift versions
- Automated the build and archive process for iOS App Store releases
- Created the white label apps on Android, Titanium, Swift, and Web platforms
- Created the Vagrant dev environment influencing our shift towards infrastructure as code (IaC)

- Created the Ansible playbook for efficiently configuring and maintaining engineer MacBooks
- Created the modern rate engine on AWS Lambda using Node/TypeScript and DynamoDB
- Analyzed data and created visualizations for various metrics using Snowflake
- Created various shared NPM packages to use in multiple microservices
- Transformed and imported the zone, rate, and restriction data for multiple cities
- Created comparison scripts to ensure backwards compatibility when versioning APIs
- Created API integration testing scripts to verify services are deployed and running correctly
- Led the creation of the wallet payment system for fleets of vehicles used by UPS and FedEx
- Load and stress-tested the APIs to measure and improve performance metrics
- Implemented the process and scripts for safely handling database migrations
- Created the Makefile that automated our legacy local dev environment
- Created the Swagger OpenAPI Schema to document our APIs
- Rewrote the iOS parking app from Titanium to Swift
- Created the iOS transit app in Swift
- Various other things...

Computer Programmer – [UNC Chapel Hill Computer Science Department](#)

November 2011 - June 2012

I built a YouTube app for people with disabilities who access their computers via 2 switches.

Education

Bachelor of Science (B.S.) Computer Science – University of North Carolina at Chapel Hill

2011 - 2013

I placed in multiple programming competitions and hackathons both individually and with teammates.

Projects

My Games – <http://games.hnswave.co>

I enjoy building browser-based games in my free time using a game engine I wrote from scratch.