

# Andrew Anthony Gerst

Senior Software Engineer (Full-Stack)

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- I promise to whoever saves me from being homeless that you won't regret giving me a chance!
- I was Passport's 12th employee (5th engineer) and we grew to 300+ and acquired 3 companies!
- I was the 5th member of Checkr's International team and helped our team scale to 30 strong!

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## Skills

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

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## Experience

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

*February 2021 - April 2024*

### Major Product Enhancements

- Created a Ruby on Rails platform that dramatically reduced the complexity of building new screenings
- Led the implementation of Amplitude analytics that significantly improved our product insights
- Led the creation of multiple new screenings that expanded our product capabilities
- 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

### 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 local dev environment
- Ensured a smooth transition from Intel to ARM based MacBook architecture
- Created scripts automating workflows that required manual interactions
- Created scripts to ease the administration of our Kubernetes clusters
- Created Ruby Thor scripts that automated various on-call support tasks

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

*May 2020 - September 2020*

Created a docker environment for local development and fixed various frontend and backend bugs

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

*December 2013 - April 2020*

### Modernized & Scaled Architecture

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

### Promoted A High-Performance Culture

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

### 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
- Rewrote the iOS parking app in native Swift
- Created the iOS transit app in native Swift
- Maintained the iOS Swift apps through multiple Swift versions
- Created the legacy local dev environment Makefile
- Created the Vagrant dev environment using Ansible which helped automate the configuration for production
- Created the whitelabel apps on Android, Titanium, Swift, and Web platforms

- Created an Ansible playbook to make setting up and maintaining MacBooks more efficient
- Created the modern rate engine on AWS Lambda using Node and DynamoDB
- Evaluated candidate programming challenge submissions
- Created database Migrations repo, process, and scripts
- Automated the build and archive process for iOS App Store releases
- Analyzed data and created visualizations for various metrics
- Transformed and imported the zone, rate, and restriction data for multiple operators
- Created the Swagger API Schema repo
- Created various shared NPM packages to use in multiple microservices
- Created the fleet admin portal in React/TypeScript
- Load and stress tested the APIs to measure performance metrics
- Created various comparison scripts to ensure backwards compatibility when updating services
- Created the API integration testing scripts that are used to verify things are working after deployments
- Various other things...

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**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.

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## 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.

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## 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.