




Alex Manning

Software Engineer

Contact

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Skills

Languages

- JavaScript
- TypeScript
- Go
- Ruby
- SQL
- HTML5
- CSS3/LESS/SASS

Backend Technologies

- Ruby on Rails
- Node
- Express
- GraphQL

Frontend Technologies

- React
- Redux
- D3
- Webpack

Testing

- Rspec
- Jest
- Mocha
- Chai

Database

- MySQL
- DynamoDB
- MongoDB
- ElasticSearch

Infrastructure

- AWS
- Heroku
- NGINX

Employment

Block Inc., San Francisco, CA

Technical Lead

04/2022 – Present

Senior Software Engineer

09/2019 – 04/2022

- Lead the Metrics Workstream, a set of 3 projects, consisting of 3 engineers and a data scientist, to improve metrics collection and introduce an A/B testing framework for the Web Payments SDK. I wrote the engineering design doc and implemented a custom A/B test framework for the Web Payments SDK, leading the first two A/B tests to reduce address verification rejections for credit card payments.
- Built the frontend utilities, infrastructure, and code patterns to introduce the first payment method into Block's new Web Payments SDK. Work included building out HTTP request and MessageChannel wrappers, implementing unit testing, event logging infrastructure, in addition to setting up the coding patterns for how payment methods would be built in the future. I later turned these utilities into a shared library which is used across Block for our different web SDKs.
- Optimized unit test bundling and execution, reducing run time for all tests by 60% and memory usage to 1/100th of the previous footprint. The reduction of memory usage eliminated the main cause for random timeouts of tests.
- Through code splitting and code reorganization, I cut our minified bundle size down by 40%, while still providing a main bundle which allows for 84% of buyers to complete checkout without downloading additional bundles.

Amazon, San Francisco, CA

Software Development Engineer

11/2018 – 09/2019

- Performed analysis, wrote proposal for external technologies, and worked on team of two to re-write the Music Web Application backend to a Spring/Node solution utilizing AWS. Lead deployment of said backend, coordinating with QA on the test plan and plan to ramp up deployments globally.
- Implemented Jest within our new backend and auxiliary services. Within a month of implementation, two services without test coverage jumped up to 50% branch coverage.

Nyansa Inc., Palo Alto, CA

Software Engineer

08/2017 – 11/2018

- Implemented an internal and customer-facing GraphQL API, allowing for custom queries while significantly reducing the number of endpoints needed for each requirement. This API is now being expanded to a full reporting framework.
- Created the Health & Remediations page. Utilizing ElasticSearch aggregations, this page provides immediate feedback on different incident attributes, allowing users to easily find root causes for issues affecting client. I created an internal library, using components from this page, which is now used throughout the application.

Krypton Cloud, San Francisco, CA

Software Engineer

03/2017 – 08/2017

- Optimized alarm monitoring pages through removal of redundant components, elimination of extraneous watchers, and replacement of inefficient third party libraries, reducing load times by 15%, and CPU cycles by close to 40%.

Paramit Corporation, Morgan Hill, CA

Industrial and Systems Engineering Manager

07/2010 – 09/2016

Education

University of Michigan - Ann Arbor

M.S.E. in Industrial and Operations Engineering

B.S.E. in Industrial and Operations Engineering