Andrew Leung

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Jun 2023 - Present

Skills

Programming Languages: TypeScript, JavaScript, Python, Ruby, SQL, HTML, CSS **Tools & Frameworks**: Git, React, Next.js, Ruby on Rails, Tailwind, PostgreSQL, BigQuery, Vim

Work Experience

PayPal Software Engineer 1 — Remote

- Maintained Braintree's internal Ruby on Rails application used to assess fees, generate statements and reports, and disburse over \$1.5B daily across tens of thousands of merchants
- Led development and live testing of a feature used to pause disbursements and hold funds for high-risk or delinquent merchants, achieving a 100% success rate during live testing and facilitating the processing of \$1.4M in held funds daily
- Automated the migration of \$55M in held merchant funds into new interest-generating bank accounts using a Ruby Rake task scheduled with a Kubernetes CronJob
- Prevented the potential misallocation of \$4.2M by resolving an edge case in the timing of transaction ingestion, transfers between internal bank accounts, and transitioning merchants onto new disbursement flows
- Increased monthly revenue by \$500,000 by correcting fee calculations to round to the nearest cent instead of truncating

Poloniex Software Engineer Co-op — Remote

- Eliminated manual engineering effort spent updating web marketing material by migrating content to DatoCMS, fetching it with GraphQL, and serving it from a Node.js backend, enabling fully dynamic content management
- Expanded the expressiveness of JSON-based rule definitions in a Node.js permissions service used to govern user permissions across internal applications by adding support for logical negation of rules to its open source rules engine
- Constructed Zendesk and Jira Service Desk API integrations and internal web tools using PHP, TypeScript, and React to streamline customer support engineer workflows

Sandbox at Northeastern University Software Developer - Remote

- Developed features for a university course planning web application using Ruby on Rails, TypeScript, and React
- Wrote a Node.js parser to translate university course documentation PDFs into JSON for internal usage
- Provided technical mentoring to teammates on tasks through routine pair-programming

Teikametrics Software Engineer Co-op — Boston, MA

- Quickly ramped up onto new technologies, progressing from no Scala, TypeScript, or web development experience to becoming an active contributor to a Scala with Cats backend and TypeScript, React, and Redux frontend
- Reduced effort for users modifying ad campaign targets by implementing a React UI and Scala API for bulk CSV uploads

Projects

Bookmark Manager github.com/andrewjleung/linkr

- Created a self-hostable bookmark URL manager for personal use using TypeScript, React, Next.js, and shadcn/ui components
- Persisted data in a PostgreSQL database hosted by Supabase and queried via Drizzle ORM
- Restricted sign-in to a predefined user via GitHub OAuth using Supabase Auth
- Built a tool for importing and re-categorizing bookmarks from Raindrop.io

Compiler for Python-like Language Closed Source

- Wrote a compiler backend in OCaml and a C runtime for a Python-like expression-oriented language
- Supported dynamically-typed values including numbers, Booleans, tuples, strings, and first-class functions
- Managed program memory with mark-and-sweep garbage collection and register allocation
- Wrote over 600 unit tests and end-to-end tests to ensure correctness of compilation using OUnit

Education

Jan 2020 - Aug 2020

Sep 2020 - May 2021

Jan 2021 - Aug 2021

2022

2023 - Present