

ASHIL FARAHMAND

ashilfarahmand.com Washington, DC

SKILLS

Ruby on Rails, React, Stripe, PostgreSQL, Git, CSS, JavaScript, GraphQL, MongoDB, Node.js, NewRelic, TDD, AWS

EXPERIENCE

Software Engineer - Billing Squad

Arcadia Power

May 2022 - Apr 2023

- Independently investigated gnarly Stripe transfer issue, designed & built solution that eliminated associated on-call alerts and saved ~10 people-hours/month, then wrote a comprehensive retro for stakeholders
- QAed Rails, GraphQL, and React apps for new MPE feature then scoped tasks to add missing functionality
- Documented and diagrammed all solar and utility remittance flows for mentoring new engineers
- Created implementation plan for migrating ACH service from Silicon Valley Bank to a new provider

Software Engineer

GiveCampus

Dec 2018 - Nov 2020

- Led engineering initiative to build an automated invoicing tool to generate invoices and interface with Quickbooks API thereby freeing at least 50 people-hours/month
- Optimized server code and SQL queries across the codebase to reduce processing delay by up to 95%
- Performed major refactor of matching gift code into a separate service via TDD using rSpec
- Upgraded Stripe API payment processing code collaboratively with engineering team
- Rapidly responded to partner support tickets by hotfixing bugs and deploying to Heroku

Multiplex Communications Patent Examiner

US Patent and Trademark Office

Sep 2008 - Jan 2018

- Performed literature review for patent applications in network communications to identify novelty relative to existing technologies achieving a 90% affirmation rate at the Board of Patent Appeals and Interferences
- Earned docket management award for achieving 110% of timeliness goal for processing of applications
- Collaborated with adversarial attorneys to negotiate mutually agreeable solutions

Graduate Research Assistant

Virginia Polytechnic Institute and State University

May 2008 - Sep 2008

- Proposed cooperative collision avoidance system to prevent collisions between autonomous vehicles
- Developed sparse and dense traffic optimization algorithms to mediate traffic flow through an intersection
- Presented published research at the IEEE Intelligent Vehicles Symposium at Xian, China

PROJECTS

Quikstarter

[Live Site](#) | [Github](#)

A single-page app that clones features of Kickstarter.com using a React/Redux frontend and Ruby on Rails backend

- Designed a rapid search feature that triggers AJAX search requests in response to user keystrokes
- Implemented a discovery feature by using a custom route to access projects by category via a RESTful API
- Implemented a secure authentication feature by storing BCrypt hashed passwords in a PostgreSQL database
- Used Webpack to bundle and transpile assets

PUBLICATIONS

Farahmand, Ashil Sayyed, and Lamine Mili. "Cooperative Decentralized Intersection Collision Avoidance Using Extended Kalman Filtering." In *Intelligent Vehicles Symposium, 2009 IEEE*, pp. 977-982. IEEE, 2009

EDUCATION

Virginia Polytechnic Institute and State University (2004-2008)

BS/MS Electrical Engineering