Rafael N. Magalhães

MACHINE LEARNING · CAUSAL INFERENCE · ANALYTICS

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Summary

Site Reliability Engineer at fintech company KarrotPay. Have led growth at infrastructure departments in two fintech companies as lead engineer and founding member. 12+ years of diverse software engineering experience with specialties in software architecture design, infrastructure operation, backend development, and security engineering.

Love to contribute to open sources and tech communities by sharing knowledge and experience. Prefers a command line interface environment as a big fan of Vim, Linux, and macOS. Always trying to customize to find the most optimal environment. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools.

Skills

Languages Python, Java, JavaScript, Ruby, C, Hack, Scheme
Frameworks Django, Chef, React, Angular, AWS, Docker, GraphQL, Flask

Experience

Facebook

SOFTWARE ENGINEER   JULY 2019 - PRESENT

- placeholder

Toast

SOFTWARE ENGINEER INTERN (PART TIME)   FEB. 2019 - APR. 2019

- placeholder

Drizly

SOFTWARE ENGINEER INTERN   MAY. 2018 - AUG. 2018

- Implemented a re-designed onboarding flow for new retailer customers, improving the onboarding process for account managers and customers with automated Salesforce integration.

Facebook

SOFTWARE ENGINEER INTERN   JAN. 2018 - APR. 2018

- Helped migrate the Instagram Django web server to perform parallel IO operations and handle concurrent requests within each worker process to reduce latency and increase capacity as the web framework scales with users, servers, and developers.
- Created a framework to safely predict the performance and correctness of server worker processes handling concurrent requests from a production environment. Preemptively caught and fixed regressions related to increased cpu instructions, caching, and global state contamination

Toast

SOFTWARE ENGINEER INTERN   JAN. 2017 - AUG. 2017

- Built a microservice, database schema, and related web pages to manage customer accounts — 50,000+ created within the first two months.
- Designed and helped implement a second microservice as a month-long architecture refactor to reduce technical debt and build the infrastructure for upcoming payment features.
- Enhanced the audit tool to query real-time data from restaurants' Android devices, proactively resolving customers' configuration bugs.

CSTUY Hacking Sessions

PROGRAMMING MENTOR, TA   SEPT. 2014 - MAR. 2015

- Taught programming concepts to high school students using Java and Processing while providing input for lesson plans and project ideas.

Projects

Shellfish

- A command line interface based on the Unix Bash shell, written in C.
- Supports EOF (Ctrl-D) and SIGINT (Ctrl-C), multiple commands per line, and chained redirection and piping.

Zero Robotics

- Semifinalist out of 200 teams in MIT's international high school programming competition in C.
- Implemented 3D vector physics and game strategy for an autonomous satellite simulation using the ZR API.

Education

Northeastern University

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.5/4.0   MAY 2019

- **University of Hong Kong**, Hong Kong, China — SEMESTER ABROAD FALL 2018
- **Aquincum Institute of Technology**, Budapest, Hungary — SEMESTER ABROAD FALL 2017