

Employment

Nextdoor - Lead Front-end Architect (React, TypeScript, Flow, RTK, RTL, Bash, Docker) (June 2021 – Sept 2022)

- **Founded isomorphic SSR/CSR codebase** for entire website, accelerating build speed, client performance, and pipeline parallelization.
 - **Reduced local dev resource consumption by 70%** via novel dev-server to replace cumbersome Docker/Python/Webpack combo.
 - **Unified state and file structure**, aggregating common needs across the org into a single source of truth.
 - **Solved org-wide unit-test issues plaguing devs for years** in a matter of weeks via customizable util functions for async logic, user interactions, redirects, and mocks.
- **Converted entire site from Flow to TypeScript**, consisting of millions of lines of code through custom AST parser CLI util.
- **Mediated org's lack of QA** by building a custom system for running the prod environment locally via Docker.
- **Constructed 5-year roadmap to improve front-end DX and performance.**
 - Executed complete website analysis to discover largest CI/CD bottlenecks.
 - Laid out instructions/metrics for transitioning from a monolithic structure to micro-frontends.

E-Trade Full-Stack Software Engineer - Senior Analyst (React, Spring, MobX, Enzyme) (July 2018 – June 2021)

- **Mediated company-wide network issues** in personal time via novel `MockRequests` library (see Open-source below).
 - **Eliminated largest front-end blocker** in the company: server rolls occurring twice per week that disable all API endpoints.
 - Improved developer productivity by 40%.
 - Included in company-wide React/SCSS design-language library/boilerplate due to its efficiency.
- Developed a dashboard for analyzing internal systems before markets open (July – Dec 2018).
 - **Designed and spearheaded a novel Python architecture** to enhance data flow/maintainability, and reduce technical debt.
- Built 2 platforms for creating investment plans (first year netted **\$2.5 million, +37% purchases, +15% new customers**).
 - **Boosted client performance by 50%** through restructuring React/MobX global state management.
 - **Enhanced server scalability** by optimizing data aggregation logic and introducing multithreading.
 - Leveraged design pattern acumen to simplify client-server-DB communication by restructuring Spring DAOs, DTOs, & data flow.
- Fostered a culture of learning and growth in the organization's developer community.
 - **Primary mentor for onboarding all new hires**, including sessions for teaching git, libraries, and the development stack.
 - **Optimized team productivity** by engineering scripts for automating tasks, including Jira ticket autocompletion in git, using local text editors/IDEs to code on remote servers, remote file exchanges, cookie extraction/refresh during development, etc.
 - **Inspired deeper collaboration** across various Slack channels, leading to improvements in coding practices.

Android Engineer (Java, Internship) <play.google.com/store/apps/details?id=com.etrade.mobilepro.activity> (June – Aug. 2017)

- Pioneered E-Trade's first Android Edge panel widget that displayed a user's watch lists and respective stock data.
- Orchestrated the state management, authentication, and caching systems; Coordinated UI/UX design and testing.
- Facilitated a seamless MVP hand-off to maintainers by writing guides, documentation, and descriptive git commit messages.

Open-source

MockRequests (JavaScript) <<https://www.npmjs.com/package/mock-requests>> (Sept. 2019)

- Launched the first lightweight, yet powerful, mocking library that **doesn't require changing source code or running local servers**.
- **Boasts features other solutions seldom support:** Simple one-step configuration that automatically works throughout the entire application, language/library/environment agnostic, exceptionally performant, toggling mocks via CLI.

Projects

Anime Atsume (Spring Boot, React) <<https://github.com/D-Pow/anime-atsume>> (June – July 2020)

- Unique anime search engine providing the **quickest possible path** from searching titles to watching episodes, unlike most sites.
- Full-stack: **SPA React** front-end, **Spring Boot** back-end, **Docker** container, **AWS** host, **GitHub Actions** CI/CD.

Picture Place (React Native, Ionic, Spring Boot) (June 2022 – Present)

- Mobile app to automatically scan images taken of restaurants and/or menus, use AI to parse text for tags, and add them to an in-app menu of places you want to visit based on cuisine, price, quality, etc.
- Written as both a native app and PWA for the best user experience.

Research – Atoms of Confusion (C, PHP, HTML/CSS) <www.atomsconfusion.com> (Aug. 2016 – May 2018)

- Determined code patterns that are objectively confusing, with implications for improving design principles and specifications.

Education

NYU Tandon School of Engineering – GPA: 3.8/4.0

Master of Science in Computer Science (May 2018) Brooklyn, NY

New College of Florida, the State's Honors College

Bachelor of Arts in Chemistry (May 2016) Sarasota, FL

Skills

Languages (ranked 5 > 1)

JavaScript (5), Java (4), HTML (3), SCSS (3), Python (3), SQL (2), PHP (1), LaTeX (1).

Technical Skills

React, Spring Boot, Git, MobX, Webpack, Bootstrap, Jest, Node.js, JUnit, Gradle, Maven, Oracle DB, Linux, Bash, Regex, Agile (Scrum), BitBucket, Jira, CI/CD (Jenkins, Travis), GitHub, Heroku, Docker, Google Cloud, Automation Testing.

Additional Relevant Activities

Eagle Scout (2011): Highest rank, top 2% of all Boy Scouts.

Cyber Security Club (Sept. 2016 – May 2017).

NYU Healthcare Hackathon Winner (Nov. 2016).

Japanese (2019 – Present): Approaching N5 fluency.