

# Bill Cauchois

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## OBJECTIVE

Find a senior backend engineering role where I can be a multiplier to the whole team's success by focusing on systems, tooling, and documentation/process.

## WORK EXPERIENCE

### Senior Software Engineer, Fi GPS Dog Collar (May 2018 – August 2021)

As the first backend engineer hire at Fi, I developed and scaled many of the systems core to the product (a GPS tracking dog collar), and helped launch the initial product as well as its successor (series 2).

- Implemented several core product features in the TypeScript backend: walk tracking (including a "segmentation" system to divide activities into walks and stationary periods), escape alerts, sleep tracking, and a social feed.
- Implemented GraphQL APIs for the apps and collaborated with client engineers on API design.
- Helped scale our monolithic backend and PostgreSQL database by optimizing queries, introducing caching, and optimizing API endpoints using tracing.
- Implemented features on the ecommerce site across the backend and React frontend, including gift card purchasing/redemption, a referrals program, and a monthly pricing scheme.
- Implemented web-based tools for administration and for the customer support team, the largest of which was an in-house RMA system for processing customer returns.
- Created an ETL infrastructure based on Luigi that powered jobs written by myself as well as others.
- Iterated on the infrastructure-as-code powering our services. Implemented continuous delivery for the main backend as well as several other services.
- Wrote firmware in C, including writing the majority of the firmware for the charging base product and implementing several features in the dog collar itself.
- Helped develop and document BLE protocols.
- Implemented the BLE subsystem for the Android app in Kotlin, including scanning for devices, running in the background, and interacting via GATT characteristics.

### Staff Software Engineer, Foursquare Labs (June 2012 – February 2018)

- Built an email blast tool for sending marketing emails that scaled to 10s of millions of users.
- Worked on numerous projects related to data quality on Foursquare's "Venues" team, including building a new version of the web page for managers to add their business to Foursquare, building a web page for viewing the edit history of a venue, and improving web-based flag review tools for superusers.
- As a Tech Lead on the "Swarm" team, developed tech specs for new features related to the consumer app and coordinated client and server engineers, while continuing to work on backend development.
- Mentored junior engineers.

## EDUCATION

### University of Washington, Seattle, WA (Sept 2008 – Jun 2012)

B.S. in Computer Engineering (software focus).

## SKILL HIGHLIGHTS

- Proficient: JS/TypeScript, Python, SQL, CSS, HTML, Scala, Java, Kotlin, C, Bash.
- Hobbyist: Rust, Clojure, Haskell, Go.