Cameron Brill

cameronbrill.me

me@cameronbrill.me
469-401-1162

Experience

Headway *Tools Used: Python, DynamoDB, OpenAPI, Kafka, PostgreSQL, Terraform, TypeScript, Next.js, React, Sentry, Datadog* Remote
Software Engineer May 2022 - Present

- **Led Modularization:** Led effort and developed automation to break up monolithic codebase into product-domain-level components with 100% ownership coverage in <2 quarters without slowing down product development, improving code maintainability CSAT score by **54%** (37/100 -> 57/100).
- **Led Testing Strategy:** Led design and implementation of end-to-end testing strategy, increasing overall test coverage and quality, and created unit test framework that is 99% faster (**45 sec test setup -> 0.5 sec**) and flake free.
- **Optimized Feedback Loops:** Reduced test suite runtime by **81%** (21min -> 4min), reduced local dependency install time by **99%** (2min -> 1sec), and integrated linters, formatters, and test runners into CI/IDE, saving >**$200k/month** in engineering time and improving developer velocity.
- **Streamlined Engineer Onboarding:** Improved codebase onboarding through zsh scripts, readmes, and recurring onboarding module, taking engineer setup time from a week down to a day (**85% time reduction**).
- **Improved Codebase Experience:** Introduced extensive code quality tooling (linters, ast analyzers, typecheckers, formatters), created extensible custom linting framework, giving engineers instant feedback on code correctness.
- **Built Developer Experience Dashboard:** Created research-backed datadog dashboard giving developers and leaders a easy-to-digest overview of devex at Headway (i.e. relevant metrics about feedback-loops and cognitive load).
- Consistently shared most problematic measurements of code quality (e.g. cognitive complexity, dependency cycles) with senior and staff engineers, heavily influencing org-wide engineering strategy.
- Led insurance benefit and claim filing accuracy and resiliency projects, improving profit margins by >**$750k/month**.
- Optimized complex PostgreSQL queries, improving latency by **88%** (4 seconds -> <500 milliseconds).
- Worked with product & design to support new insurance features and improve & automate contact form.

Highlight *Tools Used: Go, AWS Products(ECS, EC2, S3, RDS), PostgreSQL, TypeScript, React, Datadog, Highlight* Remote
Software Engineer May 2021 - Jan 2022

- **Led Alerting Product:** Managed and developed distributed sliding-window alerting system.
- **Led Backend Errors Product:** Developed thread-safe, efficient *backend client* with Go and GraphQL.
- Engineered fault-tolerant and idempotent worker queue consumer using **Go and Postgres.**
- Responded to and resolved production bugs using Highlight, Datadog (Alerts, Metrics, APM), Slack bots, and Intercom.

Datadog *Tools Used: Go, Kafka, Java, TypeScript, React, Datadog* Remote
Software Engineer Intern Jan 2021 - May 2021

- Developed highly concurrent **Kafka consumer** micro-service in **Go**, deployed with **Kubernetes**
- Wrote reactive api service in **Java** with accompanying frontend in **React/TypeScript**.
- Optimized frontend routing in Python and components in **React/TypeScript**.

Dive Chat *Tools Used: Node.js, Go, Firebase, GCP Functions, React Native, Expo, GitHub Actions* Remote
Software Engineer Intern Aug 2020 - Dec 2020

- **Improved Code Quality:** Converted Node.js backend into well-linted logical **Go** services, improving latency by **10x**.

Microsoft *Tools Used: Python, gRPC/gNMI, Telegraf, InfluxDB, Grafana* Remote
Software Engineer Intern May 2020 - Aug 2020

- **Modernized Network Telemetry Collection:** Introduced gNMI data collectors, reducing latency by **99%** (5min -> 1sec).

State Farm *Tools Used: Java, Spring Boot, GitLab CI/CD* Dallas, TX
Software Engineer Intern May 2019 - Aug 2019

Reveal Modern *Tools Used: JavaScript, Python, WordPress* Dallas, TX
Software Engineer Intern Jan 2018-Apr 2018/Dec 2018-Mar 2019

Projects

home *Tools Used: Python, Docker, Fly, RenovateBot, GitHub Actions, Mise, uv, Dprint, ruff, ty, pyright*

- Engineered home management system to vacuum my apartment whenever my cat uses his litter box.

Jet Lag Munich - Map Generator *Tools Used: Python, RenovateBot, GitHub Actions, Mise, uv, Dprint, ruff, ty, pyright*

- Developed system to generate a Munich game map for Jet Lag The Game (a turn-based city-wide travel game) using geospatial data sources.
- Created custom map regression testing framework to ensure map quality as I added new map features.

TAMUhack *Tools Used: Python, PostgreSQL, Docker, Heroku, AWS S3, Cloudflare*

- Raised $4k in sponsorship, led and mentored 5 student developers, owned registration system, website, and mobile app.

Education

Texas A&M University Aug 2018 - Apr 2020

GPA: 3.4/4.0; 2.5 years in coursework towards BS in ***Computer Science***

Honors & Awards

MLH Top 50 Hacker of 2020: ***99.95th*** percentile hackathon competitor.

Winner of **17 hackathons**, including:

- Treehacks(Stanford) 2021
- hack:now(UC Berkley) 2020