

# Brett Gardiner

SOFTWARE ENGINEER

✉ [recruit@brett.cloud](mailto:recruit@brett.cloud) | 🏠 [brett.cloud](https://brett.cloud) | 📺 [brettinternet](https://brettinternet.com) | 🌐 [brettinternet](https://brettinternet.com)

## Professional Summary

Senior Software Engineer with 8+ years architecting scalable systems that handle hundreds of thousands concurrent connections. Expertise in real-time IoT infrastructure, distributed systems, and modern web applications using Go, TypeScript/React, Elixir, Python, and Rust.

## Work Experience

### PDQ.com

*Salt Lake City, Utah*

SENIOR SOFTWARE ENGINEER

*Feb. 2018 - PRESENT*

- Architected and delivered enterprise-scale SaaS platform using Elixir, Phoenix, React, PostgreSQL, ClickHouse and distributed Rust agent architecture, driving 300% sales growth within 6 months of release and establishing technical foundation for company expansion
- Tech lead for optimizing of real-time IoT communications infrastructure supporting 500,000+ concurrent connections through advanced pubsub and queuing systems, GenServer and concurrency patterns, and performance tuning orchestrated in a production Kubernetes cluster
- Drove technical expansion of product portfolio and engineering team to support company acquisition strategy, onboarding polyglot services from acquired products in C#, Python, Go, and Node.js
- Spearheaded modernization of legacy systems with Node.js and multiple third-party integrations, successfully replacing C# application and modernizing the CI/CD pipeline with GitHub Actions, Terraform & ArgoCD

### Stealth Startup

*Salt Lake City, Utah*

SENIOR SOFTWARE ENGINEER (CONTRACT)

*May 2024 - Apr. 2025*

- Led creation of desktop service and dashboard using Go, TypeScript, React, and SQLite to manage and monitor distributed network of IoT devices, enabling real-time data collection and remote configuration
- Built REST API backend with Go and PostgreSQL, implementing robust authentication, data validation, and error handling to ensure secure and reliable communication between devices and central server
- Implemented update mechanisms with The Update Framework (TUF) to ensure secure and reliable software delivery across devices in the field

### ForwardMomentum LC

*Lehi, Utah*

SENIOR SOFTWARE ENGINEER (CONTRACT)

*Aug. 2021 - Feb. 2022*

- Developed real-time healthcare communication platform using Google Firebase, enabling secure instant messaging between providers and patients to improve care coordination

### Crossroads Technologies

*Salt Lake City, Utah*

SOFTWARE ENGINEER

*May 2017 - Feb. 2018*

- Engineered enterprise learning management system using Angular, Python, Django REST Framework, and PostgreSQL, ensuring HIPAA and HITRUST compliance for healthcare industry

## Education

### Brigham Young University

*Utah*

B.S. IN NEUROSCIENCE

*2011 - 2015*

- Concentrated in computational neuroscience and neuroimaging analysis, developing strong foundation in data processing, statistical analysis, and scientific computing
- Developed Python data processing pipelines and automated segmentation algorithms for large-scale neuroimaging datasets in Alzheimer's research, utilizing specialized Linux software (FSL, FreeSurfer, AFNI)