

ALLISON EMBREY Software Engineer

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👤 PROFESSIONAL SUMMARY

As a full-stack software engineer, I thrive on breaking down complex problems into manageable parts and finding solutions that make everyone's job easier. I'm passionate about writing clean, maintainable code that's easy to understand and extend. My approach is user-centric, always considering how my work impacts the end-user.

💻 PROFESSIONAL EXPERIENCE

Software Engineer & Co-Creator, DataLoaf; Open-Source Project [🔗](#) Jan 2024 – Sep 2024

DataLoaf is an open-source, self-hosted product analytics solution for small to medium teams.

- Published an SDK for **data capture from any Node.js backend**, sending event data to AWS infrastructure for processing.
- Created a TypeScript **backend query service to facilitate event data retrieval and processing** via a REST API.
- Developed React frontend dashboard that utilized DaisyUI to **display aggregations based on event type and other filters**.
- Used Terraform and Go to make a CLI tool that **automates the setup / teardown of 50+ AWS resources with one command**.
- Designed a scalable data pipeline with the potential to scale to **over 500,000 events per second** using Kinesis Data Streams.
- Spearheaded a backend refactor that **improved extensibility and reduced redundancy by 60%**, enhancing maintainability.
- Authored technical case study **detailing architecture decisions and design trade-offs**, showing thoughtful problem solving.

Software Engineer, deeproot Pinball Oct 2018 – Oct 2020

deeproot aimed to create affordable full-scale pinball machines for family homes.

- **Translated hundreds of pages** of pinball rules into event-driven backend code using Go and a proprietary framework.
- Led the transition from manual to automated testing, **resulting in a 70% reduction in time spent on repetitive tasks**.
- **Reduced duplication between games by around 30%** by creating an API that standardized common gameplay rules.
- **Decoupled backend and frontend** by creating a standardized emitter that triggered custom events for the frontend.
- Contributed to the development of the in-house game framework, **implementing bug fixes and new features**.
- Developed a bash utility script to report what sound files still needed to be used, **eliminating manual tracking**.
- **Collaborated with cross-functional teams**, converging work across frontend, backend, framework, firmware and hardware.

📚 SKILLS

Languages: JavaScript/TypeScript, Python, Go, SQL

Full-Stack: Node.js, Express, React, Postgres/PostgreSQL, MongoDB, REST, Jest

Cloud/Infra: Docker, Nginx, Terraform, AWS (API Gateway, Lambda, Data Streams, Firehose, S3, Redshift)

Other: Git/GitHub, Bash/Linux, CI/CD, Trello, Atlassian, BitBucket, Agile

🎓 EDUCATION

University of Texas at San Antonio [🔗](#) 2008 – 2014

Minor in Computer Science, B.S. in Mechanical Engineering