ALLISON EMBREY Software Engineer

✉ alliembrey@pm.me 🔗 allisonembrey.com ⌗ AlliLearns in allisonembrey

🖥 PROFESSIONAL EXPERIENCE

Software Engineer & Co-Creator, *DataLoaf; Open-Source Project* ↗   Jan 2024 – present

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, showcasing thoughtful problem solving.

Teaching Assistant & Community Moderator, *Launch School*   Feb 2022 – Jan 2024

Launch School is an intensive, multi-year online program focused on teaching the fundamentals of software engineering.

- **Conducted 275+ written and live interview assessments**, giving detailed feedback on student performance.
- Provided **over 350 code reviews** of student projects, providing advice on bug fixes and code structure.
- Authored two assessments, featuring questions to **evaluate problem-solving skills and conceptual understanding**.
- Conducted weekly study sessions in JavaScript and Networking, **fostering a collaborative learning environment**.

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

Web Dev: JavaScript/TypeScript, Python, Go, Node.js, Express, React, SQL, PostgreSQL, MongoDB, REST

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

Launch School ↗   2021 – 2023

A rigerous, multi-year online program focused on mastering Software Engineering fundamentals

University of Texas at San Antonio ↗   2008 – 2014

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