

William Yennie

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EXPERIENCE

2024 – 2025

Software Engineer; Creator, *Tabletop Ledger*

Developed Tabletop Ledger, a web application designed to help tabletop RPG game masters organize their campaigns.

- Built a tree-structured page management system featuring a WYSIWYG text editor, allowing game masters to efficiently document campaign details.
- Integrated a chat interface that delivers context-aware insights based on the page a user is viewing, enhancing session preparation and organization.
- Implemented WebSocket-based streaming for AI API responses, ensuring fast and responsive delivery of contextual insights to users.
- Conducted user feedback sessions to improve UX/UI design and functionality, resulting in a 20% increase in user satisfaction during beta testing.

2024

Open Source Contributor, *ZenML*

Developed a chatbot feature for the ZenML VSCode extension, enabling users to optimize and troubleshoot ML pipelines through AI-driven interactions.

- Integrated AI models like OpenAI's ChatGPT and Anthropic's Claude to provide contextual responses and optimize ML pipeline components.
- Engineered a dynamic UI for the chatbot, including dropdowns and interactive elements, and implemented state management for user-selected contexts, enhancing the chatbot's ability to provide relevant assistance and improving user experience.
- Utilized advanced TypeScript techniques to handle real-time message streaming and context-aware responses.

2022 – 2023

Software Engineer; Co-creator, *Firefly* [↗](#)

Firefly is an open-source observability framework, providing an overview of serverless function health through the use of metrics and traces.

- Created a custom OpenTelemetry collector capable of handling up to 500,000 metrics and trace data points per day, enhancing data collection efficiency.
- Implemented middleware for context propagation in traces, improving trace accuracy for asynchronous Lambda invocations, potentially benefiting over 1,000 invocations across multiple functions.
- Architected a telemetry pipeline using OpenTelemetry and Prometheus, resulting in a 30% reduction in data retrieval times for performance monitoring.
- Developed a CLI tool to automate the instrumentation of Lambda functions and set up AWS infrastructure for emitting metrics from CloudWatch, reducing setup time by up to 40 hours.
- Automated AWS infrastructure setup and teardown with AWS SDK and Terraform, decreasing provisioning time from hours to under 10 minutes.
- Streamlined telemetry pipeline setup to 2 simple steps using Docker, simplifying deployment for the engineering team.
- Designed Grafana dashboards for serverless function telemetry, improving visibility into performance metrics for the engineering team.
- Authored a technical case study on Firefly's development and use case (read the case study [here](#) [↗](#)).

SKILLS

Languages & Frameworks: Ruby, TypeScript, Python, Ruby on Rails, React, Hotwire

Databases & Devops: PostgreSQL, Redis, MongoDB, AWS, Docker, Terraform, Nginx, Linux

AI/ML & Web Tech: AI Model Integration, NLP, Tokenization, Streaming, WebSockets, REST APIs, VSCode Extension API

EDUCATION

Launch School, *Full Stack Web Development*

Multi-year, mastery-based curriculum focused on fundamentals of programming.

Core Curriculum: OOP, Data Structures, Flow Control, REST, Network, Database

Capstone: Advanced Algorithms & Data Structures, System Design, just-in-time learning