

Eugene O'Fallon

 epofallon@gmail.com  Tulsa, OK

Experience

Senior Software Engineer Mar 2023 – Present

Nationwide

- Integrated AI capabilities by connecting a research model (Tavily AI) to automate data collection and underwriting research, reducing manual research work in the insurance underwriting process
- Led development of a CRM-like internal platform, guiding a team of up to 4 engineers and 2 interns. Translated high-level business needs into scalable features, technical tasks, and deployment milestones while still contributing in significant technical ways
- Designed and Implemented a 17-table relational database, RESTful APIs, and razor front-end
- Optimized backend performance with custom searching, sorting, and pagination to efficiently support data-heavy front-end tables.
- Strengthened application security by remediating vulnerabilities such as XSS, trust boundary violations, SMTP injection, and path traversal issues

Creator, Software Engineer  Aug 2022 – Dec 2022

Bard (<https://bard-rr.com>)

- Built an open-source session replay/conversion analysis tool using React, Node.js, PostgreSQL, Clickhouse and RabbitMQ
- Automated two containerized deployment options: Docker Compose and AWS (ECS, Fargate and EFS)
- Augmented existing open-source recording engine (rrweb) with session management functionality and published it as an npm package for easy instrumentation
- Authored a comprehensive technical case study detailing the problem domain, design decisions, and implementation challenges encountered while building Bard

Software Engineer 2020 – 2022

Open Source Projects

- RequestBin: A real-time Node.js application built with Express, MongoDB, PostgreSQL, web sockets, and Nginx to collect and monitor webhook requests
- The Shop: A database-backed e-commerce app built with React, MongoDB, and Node.js

Manufacturing Engineer May 2019 – Mar 2022

Arcosa Wind Towers

- Automated tooling design, saving \$50K annually and optimized wind tower production processes

Skills

Backend

.Net, Node.js, Ruby, Go,
Postgres, MongoDB,
Clickhouse, RabbitMQ

Frontend

JavaScript, React, HTML, CSS,
Handlebars.js

Tooling

Azure Devops, Docker, AWS
(ECS, Fargate, EFS)
DigitalOcean (droplet)

Education

BS in Mechanical Engineering

University of Oklahoma

2015 – 2019