Eugene O'Fallon

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Technical Projects

Bard ↗   08/2022 – present

Creator, Software Engineer

Bard is an open-source session replay and conversion analysis tool.

- Designed a backend system to ingest high volumes of data with Express.js, RabbitMQ, Clickhouse, and Postgres
- Published an npm package for the data collection agent
- Developed Bard's UI using React and MaterialU enabling the visual analysis of user sessions in the context of conversion funnels
- Automated Bard's deployment to AWS using the JavaScript SDK, ECS, EFS & Fargate
- Collaborated with a remote team of 4 engineers, including daily stand-ups and pair programming
- Authored a comprehensive technical case study detailing Bard's problem domain and the design decisions and implementation challenges encountered while building Bard: https://bard-rr.com ↗

Launch School   2020 – 2022

- Attended a mastery-based education program focused on software engineering fundamentals.
- Developed open-source web applications with technologies such as Node.js, Ruby, Sinatra, PostgreSQL, React, JavaScript, HTML, and CSS.
  - RequestBin: A real-time Node.js application built with Express, MongoDB, PostgreSQL, and web sockets to collect and monitor webhook requests.

Professional Experience

Manufacturing Engineer   05/2019 – 03/2022 | Tulsa, OK

Arcosa Wind Towers

- Reduced tooling costs by 50K by rebuilding and automating the design process and eliminating opportunities for human error.
- Improved the building of wind towers by studying, designing, and documenting manufacturing processes.

Undergraduate Research Assistant   06/2018 – 08/2018 | Washington, DC

Naval Research LAb

- Numerically modeled and analyzed detonation-driven flow fields to better understand fluid dynamics & heat transfer within a rotating detonation engine simulation.

Education

Full-Stack Software Engineering   2020 – present

Launch School ↗

BS in Mechanical Engineering (3.39)   2015 – 2019

University of Oklahoma

Skills

Backend

Node.js, Express, Ruby, PostgreSQL, MongoDB, Clickhouse, RabbitMQ

Frontend

JavaScript, React, HTML, CSS

Tooling

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