# **Eugene O'Fallon**

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# Technical Projects

Bard ☑ Aug 2022 – present

Creator, Software Engineer

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

- Engineered data ingestion and retrieval system optimized for high write volume and complex analytical queries over large datasets using RabbitMQ, Clickhouse, Express, and PostgreSQL.
- Augmented existing open-source recording engine (rrweb) with session management functionality and published it as an npm package for easy instrumentation.
- Developed Bard's UI using React and MaterialU enabling the visual analysis of user sessions in the context of conversion funnels.
- Automated two containerized deployment options: Docker Compose and AWS (ECS, Fargate, and EFS).
- Collaborated with a remote team of 4 engineers, including daily stand-ups and pair programming.
- Authored a comprehensive technical case study detailing the problem domain, 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, web sockets, and Nginx to collect and monitor webhook requests.
  - Shopping Cart: A database-backed e-commerce app built with React, MongoDB, and Node.js.
  - Todo App: A Ruby todo list application built with Sinatra, ERB, HTML and JavaScript.

# **➡** Professional Experience

### **Manufacturing Engineer**

May 2019 – Mar 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.

#### **ℰ** 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)