

GLOWSTAB

PROFESSIONAL EXPERIENCE

Rockstar Games

New York, NY

Software Engineer

March 2024 – Present

- Technical Lead for a full-stack development team, creating an ecosystem of applications to interact with our database, which acts as the source-of-truth for all performance capture data at Rockstar.
- Led the creation of a modern full-stack data platform, implementing a SQL Server database, RESTful .NET WebAPI with Entity Framework, Next.js web application, and Kafka-based change data capture.
- Maintained a legacy data management ecosystem serving 20+ interconnected internal applications with an RPC-style API backed by SQL Server stored procedures.
- Automated task assignments for complex workflows based on performance capture data, integrating with Rockstar's internal task-tracking system, streamlining post-production for artists and animators.
- Developed tools with strict adherence to privacy and authentication standards to protect sensitive project and talent information during the development of Grand Theft Auto VI.

Seagate

Minneapolis, MN

Software Engineer 2

August 2021 – May 2023

- Architected and developed a verification device using Cognex VisionPro, integrating with Basler cameras and Copley motor controllers to achieve sub-micron precision validation of hard drive head geometry.
- Designed software processes to automate head alignment and verification, eliminating manual adjustments and reducing per-part checkout time by over 90 percent.
- Developed touch screen interfaces using .NET WPF with MVVM architecture, implementing real-time data binding and custom controls, focusing on operator safety and simplicity.
- Deployed and maintained the automated measurement system across international R&D facilities in Southeast Asia, providing remote technical support.

Scrum Master

August 2021 – May 2023

- Spearheaded the adoption of Scrum methodology within established software teams, leveraging my Certified ScrumMaster (CSM) expertise to teach developers Scrum basics.

Software Engineer 1

June 2019 – August 2021

- Contributed to an automated production testing system designed to simultaneously validate over 100 hard drives and reduce manual operator interaction time by over 70 percent versus legacy tools.
- Developed an interface for the automated tool using .NET WinForms with MVC architecture, implementing real-time status monitoring and error handling to minimize operator intervention.
- Led the design of an automated process utilizing Aerotech controllers and Cognex VisionPro, enabling the tool to autonomously relearn all 108 hard drive slots in under 5 minutes after a machine rebuild.

PERSONAL PROJECTS

DivineToll.com A Full-Stack Web App for Market Analytics of In-Game Items in Path of Exile

Full-Stack Developer

September 2023 - Present

- Architected a completely self-hosted data pipeline designed to gather and process 1,000 item listings per second, optimized to run exclusively on a Dell Optiplex using Redis, NATS JetStream, and Postgres.
- Built a ridge regression model using scikit-learn and statsmodels to quantify item stat impact on pricing, trained on over 200 million events output by my pipeline.
- Implemented a metrics and logging system using Alloy, Loki, Prometheus, Pyroscope, and Grafana dashboards to track data processing metrics and reveal potential optimizations.
- Utilized TypeScript, Next.js, and Tailwind to create a modern, streamlined front-end application for viewing the final data.

EDUCATION

Iowa State University, College of Engineering

Ames, IA

Bachelor of Science - Computer Engineering

August 2015 – May 2019

- Teaching Assistant - Discrete Mathematics and Theoretical Foundations of Computing.

TECHNICAL SKILLS

Programming Languages: C#, TypeScript, JavaScript, Python, Go, SQL

Database Management: SQL Server, PostgreSQL, Entity Framework, Prisma ORM, Drizzle ORM

Frameworks and Libraries: .NET Core, React, Next.js, Playwright, sklearn

Data and Infrastructure: Redis, NATS JetStream, Kafka, Prometheus, Grafana, Loki

Other Tools and Technologies: TeamCity, OAuth, Git, Perforce, JIRA, Vercel, Protobuf

Hardware Integration: Cognex VisionPro, Basler cameras, Copley controllers, Aerotech controllers

Exposure To: C++, Docker, Kubernetes, IIS, Jenkins, SQL Sentry, AWS EC2 & S3