

Andrew Rose

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[github](#) | [linkedin](#) | [portfolio](#)

EDUCATION

Bachelor of Science - Computer Science

Western Washington University

Dec 2022

Bellingham, WA

SKILLS

Programming Languages Typescript | Python | Java | C++ | C# | MATLAB | Simulink

Technologies AWS | DigitalOcean | Docker | React | NextJS | NestJS | RabbitMQ | Hasura | PostgreSQL

Other Microservices | Cloud Computing | Full Stack Engineering

EXPERIENCE

Saturna Capital

Jul 2022 - Present

Junior Software Developer

Bellingham, WA

- Engineered a resilient and highly available API using PostgreSQL, employing a microservices architecture using NestJS.
- Led the integration of Finch API to automate payroll and demographic data retrieval, replacing manual CSV uploads. This reduced payroll errors by 30% and saved employers an average of 2 hours per cycle by automating 401(k) reports, HSA contributions, and employee demographic updates.
- Contributed to the frontend development of an internal React application, enabling company admins to manage investment accounts, users, orders, and generate reports, improving operational efficiency and data visibility across the company.
- Designed and deployed scalable systems on DigitalOcean using containerized services (Docker), resulting in a 30% improvement in deployment times and reduced server costs.
- Led the implementation of RabbitMQ message queues, improving real-time processing of incoming webhooks by 50%.
- Developed a CI/CD pipeline using GitLab CI to automate the build and deployment of docker images, ensuring testing and seamless deployments across multiple environments.
- Streamlined API request handling for third party APIs by implementing custom rate-limiting mechanisms that reduced HTTP 429 errors by 75%.

Swinomish Casino and Lodge

Jan 2019 - Jul 2022

Networking Engineer

Anacortes, WA

- Managed network security and performance for a mid-sized organization, reducing downtime by 25% by troubleshooting and resolving network issues.
- Implemented system upgrades and managed IT infrastructure, ensuring compliance with security protocols and industry standards.
- Reduced deployment time for Windows system and software updates by 40% using PowerShell scripts, increasing operational efficiency.

PROJECTS

Dice Rolling Roguelike Game

- Developed a roguelike dice roller game in Unity (C#), featuring randomly generated maps and combat mechanics driven by dice rolls.
- Implemented a dynamic upgrade system allowing players to collect gold and customize dice faces, enabling diverse strategies and replayability with unique items and modifiers.

Finance Assistant

- Created a full-stack financial tracking web application using NestJS and the Plaid API for secure authentication and financial data retrieval.
- Allowed users to create custom expense categories with personalized keywords.

NYSE Trading Bot

- Developed a backend tool for automated equity buy/sell orders on the NYSE, utilizing Python and the InteractiveBrokers API for order initiation and backtesting.
- Achieved a 11% increase in profitable trades by optimizing trading strategies based on historical data analysis.

Support Ticket Dashboard

- Developed a Python program that queries support ticket databases, presenting a clean, priority-based, and organized view of open tickets.
- Improved ticket resolution times by 25% through prioritized visibility and streamlined access to relevant information for support staff.