Harrison Oest

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Skills

- **Languages**: Python, Rust, C++, C#, TypeScript, Bash, Go
- **Frameworks**: Node.js, React, QML
- **Databases**: PostgreSQL, MySQL, MongoDB
- **Infrastructure**: AWS (EC2, S3, Route 53, VPCs, RDS, ECR), Docker, Linux, NGINX

Experience

Back End Lead Engineer, Nagrastar, LLC – Denver, CO — Feb 2025 – present

- Construction of a Python-based diagnostic system analyzing large-scale data warehouses of device logs using pre-trained ML models and large language model driven pipelines.
- Optimize Rust microservices through refactoring and caching, improving throughput and reducing latency.
- Develop TypeScript/React UI tools for complex data exploration and content delivery.
- Maintain GitLab CI/CD pipelines, reducing deployment time from hours to minutes through automation.
- Design and deploy AWS cloud architectures for high-availability distributed systems.
- Lead sprint planning, design reviews, and architecture discussions across multi-disciplinary engineering groups.

Software Developer, Nagrastar, LLC – Denver, CO — Mar 2023 – Feb 2025

- Enhanced 10+ Qt-based applications with new features and fixes, allowing for additional functionality and increased user engagement
- Built and maintained a Node.js server for data normalization and test standardization.
- Implemented Bash automation for builds, deployments, and internal tooling.

Software Developer II, Electro Magnetic Applications – Lakewood, CO — Feb 2022 – Mar 2023

- Integrated CAD visualization APIs and geometry computation libraries, expanding simulation capabilities.
- Led a UI/Core development team using agile methodologies.
- Developed a Linux installer supporting CentOS, RedHat, and Debian.

Software Developer I, Electro Magnetic Applications – Lakewood, CO — Feb 2021 – Feb 2022

- Developed commercial C#/C++ scientific software for simulating electromagnetic events on CAD geometry.
- Improved performance of simulation engines via algorithmic and memory optimizations.

Projects

Silent Sessions

- Architected and implemented a full-stack system enabling scalable silent-disco events.
- Developed a TypeScript streaming app sending live audio to a Rust backend on AWS.
- Built cross-platform iOS + Android apps for high-quality, low-latency audio streaming.

PRimate

- A Node.js + Slack integration automating pull-request tracking, resulting in reduced review cycle time and improved merge-request throughput.

Git Commit Creator

- A TUI tool in Rust to streamline Git operations, enabling users to create commits, branches, diffs, and push changes.

YouTube Duration Filter

- A browser extension for filtering YouTube homepage videos by duration, in which users select min/max durations.

Education

Colorado School of Mines, B.S. in Computer Science + Business — May 2020