

Education

- **B.Sc. Computer Science, Minor in Mathematics**, University of Minnesota. **2021 – 2024**
 - Completed in 3 years; Dean's List: Fall 2021, Fall 2022

Work Experience

Software Engineer I Other World Computing June 2022 – July 2023

- Engineered new Salesforce-ERP integration system processing 10K daily records, reducing sync failures by 90% (300 to <20 daily), and implemented real-time monitoring dashboards with Kibana.
- Diagnosed and resolved critical system failure in legacy Work Order Automation system handling 5% of company revenue (\$50K daily) within 3 hours.
- Enhanced code quality in .NET and React projects by implementing design patterns and best practices, improving maintainability and performance.
- Improved sprint delivery from 80% to 90% completion rate over 4 months by writing clear acceptance criteria, breaking down complex tasks into subtasks, and providing accurate story point estimates.
- Designed and deployed 3 automated workflows for customer service and sales teams, reducing manual reporting time from 15 hours to 1 hour weekly.

Software Engineer Intern Other World Computing March 2022 – June 2022

- Optimized 6 major LINQ queries in the internal RMA application, enhancing performance by 70%, through analysis, indexing improvements and parallel processing techniques.
- Improved application responsiveness in 3 internal apps by implementing asynchronous programming and intuitive UI elements, resulting in improved system efficiency supported by user feedback.
- Transitioned legacy applications to automated deployment using CI/CD pipelines, streamlining build processes, enabling automatic testing, and reducing manual errors.

Technologies and Languages

- **Languages:** Rust, Python, C#, Java, TypeScript, C++
- **Technologies:** Node.js, .NET, React, Svelte
- **Databases:** PostgreSQL, Redis, Microsoft SQL Server, MongoDB
- **Other:** Google Cloud Platform, Azure DevOps, Kubernetes, Docker, PyTorch, NUnit, Git

Projects and Volunteer Work

- **WebTracer** – Implemented ray tracing engine in Rust with ReSTIR technique, compiled to WebAssembly with React interface.
- **Open WebUI Desktop** – Developed and contributed desktop application to Open WebUI's ecosystem using Tauri, successfully merged into the main project to increase UX and allow enhanced capabilities.
- **VoyagerSight** – Executed a replication and extension study on Nvidia's Voyager, exploring the effects of multimodal inputs on Minecraft LLM agents' progression and creativity.
- **FRC Mentorship** – Volunteer software mentor for Eagan High School robotics team 2220, offering guidance in Java, robotics, simulation, and computer vision.
- **Open-source Contribution** - Active contributor to projects like Open WebUI, ell, JSPyBridge, and aider.chat, resolving issues and submitting PRs.
- **holmdahl.io** – Designed a personal portfolio website using Hugo, Preact, and Vite, with CI/CD on Render.com to feature my projects.
- **learnpytorch.io** – Completed a comprehensive 40-hour PyTorch course with projects on regression models, classifiers, computer vision, and transfer learning.