Stefan Hermann

herma912@umn.edu (651)-343-9692
/StefHermann /in/stefan-m-hermann stefanh.dev

Education

University of Minnesota, Honors (B.S. in Computer Science, 3.91 GPA) Expected May 2026

- **Activities**: Intramural Sports (Tennis, Soccer, Basketball), Lettuce Club, Boxing Club, University Honors Program
- **Relevant Coursework**: Algorithms & Data Structures, Machine Architecture & Organization, Linear Algebra, Software Design.
- **Awards**: Deans List (4x)

Technical Skills

Skills: Python, Java, Typescript, C, Dart, JavaScript, React, NodeJS, HTML/CSS

Technologies: MongoDB, MySQL, Firebase, AWS, Google Cloud Platform, Flutter, Docker, Git/Github, NeoVim, VSCode

Experience

Emerge Community Development, Software Consultant September 2023 - January 2024

- Identified and resolved existing issues within an inventory system while implementing innovative strategies to enhance its overall efficiency and effectiveness.
- Analyzed inventory statistics and devised a strategic sales plan to drive and elevate sales performance, **doubling profits**.
- Established a positive vendor relationship, ensuring both satisfaction and optimal product effectiveness.
- Designed a centralized inventory program for seamless accessibility, streamlining operations by synchronizing updates across various systems, including the website and back end inventory management system.

Technical Projects

TimelyTakeoff (github) Next.js 14, React, ShadcnUI, FastApi, Pandas

- Spearheaded the development of a delay prediction application, integrating machine learning techniques and web technologies.
- Utilized **Next.js** and **React** for building a dynamic frontend, enhanced with **ShadcnUI** for a modern design.
- Implemented **FastAPI** to create a robust and efficient backend, ensuring quick response times and scalable architecture.
- Implemented a **linear regression model** with a **root-mean-square error of 7**, and used **Pandas** to parse and clean data from **Kaggle**.

SnapFeast (github) Next.js 13, React, ShadcnUI, FastApi, MongoDB

- Integrated **Next.js**, **React** and **ShadcnUI** to develop a user-friendly frontend user-interface, ensuring smooth interaction for users.
- Used **MongoDB** to implement a database for efficient storage and retrieval of user data, inventory, recipes and updated items.
- Implemented user authentication with **next-auth** for security and user data retrieval.
- Utilized **FastApi** to develop a backend, enabling fast and secure data manipulation, http requests for communicating with front end, and image recognition and recipe recommendation algorithms using AI.

Discord-Clone (github) Next.js 13, React, Shadcn, Socket.io, Prisma, Tailwind, MySQL

- Developed a real-time messaging platform web application using **Next.js**, and utilized **Socket.io** to host real time audio/video calls.
- Integrated **MySQL** database hosted locally and utilized **Prisma ORM** for efficient data management and manipulation.
- Implemented authentication with **Clerk** for secure user authentication and authorization features.
- Designed a visually appealing UI with **TailwindCSS** and **ShadcnUI**, ensuring responsiveness and accessibility across devices.

MineSweeper Java, Queues, Stacks, Object-Oriented-Programming

- Developed an interactive MineSweeper game based in **Java**.
- Applied **Queues** and **Stacks** to create a **Breadth-First-Search** and **Depth-First-Search** algorithm.

Leadership

CSE: TALK Teaching Aid August 2023 - September 2023

- Oversaw a diverse group of international students, facilitating their integration into the University of Minnesota.
- Established a classroom environment aimed at enhancing the learning and professional development of international students.
- Gave presentations on a variety of computer science and engineering topics to familiarize the students with public speaking.