Matthew Graba

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EDUCATION

UNIVERSITY OF MINNESOTA - TWIN CITIES

Bachelor's Degree in Computer Science

Minneapolis, MN December 2024

Relevant Coursework:

- Software Engineering, Program Design & Development, Artificial Intelligence
- Advanced Programming Concepts, Algorithms & Data Structures
- Machine Architecture, Computer Architecture, Introduction to Operating Systems

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, SQL, C, C++, C#, OCaml, Assembly

Tools & Technologies: Git, Docker, Linux, REST APIs, UML, React, Node.js, Express, MongoDB, JUnit, Postman

Concepts: Agile Development (Scrum), SDLC, TDD (Unit tests), Groovy (learning), Angular (beginner),

Object-Oriented Design, Relational Databases, Client-Server Architecture, Software Design Patterns (Observer,

Decorator)

PROJECT EXPERIENCE

AI Dev Debugging Assistant Tool | Full Stack SaaS | React, Node.js, MongoDB, OpenAI API

- Developed a full-stack debugging assistant tool leveraging NLP-based AI to analyze and resolve developer errors.
- Built RESTful APIs with Express/Node.js and a modular backend for performance and reliability.
- Created a React frontend with real-time input handling and dynamic AI response rendering.
- Integrated MongoDB for persistent error storage and retrieval.

Cannabis Compliance SaaS Platform | Node.js, Express, React, MongoDB (In Progress)

- Architecting a compliance management platform for cannabis businesses, emphasizing seed-to-sale tracking and regulatory reporting.
- Implementing secure authentication and role-based access control (admin, auditor, staff).
- Designing REST APIs and MongoDB schemas for auditable inventory and compliance data.
- Building a React dashboard for real-time discrepancy alerts and compliance report generation.

Drone Package Delivery Simulation | C++, Docker, UML, Design Patterns

- Simulated a modular drone delivery system using Observer and Decorator design patterns
- Implemented battery management, theft prevention, and Docker-based deployment
- Collaborated via GitHub, designed UML diagrams, and wrote unit tests to ensure system reliability

Real Estate Lead Follow-Up Automation App | AI-Powered CRM Tool | JavaScript, Google Apps Script, Sheets API

- Engineered a lightweight CRM workflow in Google Forms/Sheets for automated real estate lead tracking.
- Generated personalized AI-driven email responses for agents based on form submissions.
- Enabled multi-agent support by dynamically routing form data and responses.
- Prototyped future migration to a scalable SaaS application (React, Node.js, MongoDB, Gmail API).

WORK EXPERIENCE

ALL STAR TRANSPORTATION

Maple Grove, MN

Delivery Driver

2023-2024

2021-2022

• Managed route planning and efficient package delivery with safety-first approach.

HY-VEE GROCERY STORE Meat Department Manager

Brooklyn Park, MN

• Led a small team to streamline operations and improve department efficiency.

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Maple Grove, MN

Line Cook

2018-2019

• Maintained quality and speed in a fast-paced kitchen environment.