Joseph Nelson

Phone: 734-431-8049
Email: josephmnel111@gmail.com
Github: https://github.com/josephmnel111
Portfolio: http://josephmnel111.github.io/web-portfolio

EDUCATION

University of Michigan - Dearborn
Bachelor's of Science — Dearborn, MI
Major: Computer and Information Science — GPA: 3.97
Concentration: Computer Science — September 2018 - April 2022

SUMMARY

As a software developer, I am passionate about creating custom applications that meet user requirements and exceed expectations. With proficiency in various programming languages such as TypesScript, Python, Java, and C#, I have experience in both front-end and back-end development. Whether working in a team or independently, I have a proven track record of delivering high-quality code on time.

SOFTWARE ENGINEERING EXPERIENCE

Traction Consulting Group — **August 2023 - November 2023**
Software Engineering Intern

- Created a web service that integrates Microsoft Teams with ChatGPT and allows for Microsoft Teams to have extended functionality like the ability to log meetings.
- Connected the web service to API's, so the information could be recorded in applications like Microsoft Planner using the Microsoft Graph API.
- Designed and implemented a purchase order request app that streamlines approvals for purchase orders which increases efficiency between employees and administration.

Oplogic Web Application — **September 2021 - April 2022**
Capstone Experience

- Co-created a custom messaging web application with a team of five members for a Senior Design class, using Angular, TypeScript, HTML, CSS, and Socket.IO.
- Designed a scalable server using NodeJS, TypeScript, and Socket.IO, which received incoming data from web clients, allowing for real-time updates and notifications.
- Load tested the server with 500 concurrent users successfully, demonstrating efficiency and stability.
- Created a highly efficient MySQL database that connected with the server to store and retrieve messages, customer information, and settings.
- Used Docker to streamline deployment of the application on different systems, ensuring consistency and reliability.

Personal Projects

- Developed a Euchre program using Python fundamentals, demonstrating my versatility and passion for learning new languages and technologies.
- Currently developing a fitness application using React Native and Expo, showcasing my ability to create user-friendly and visually appealing mobile applications
- Created a Jeopardy program over the summer that connected to an SQL database primarily using HTML, CSS, and PHP, demonstrating my ability to create engaging and interactive web applications.
- Built RESTful APIs for an event planner application using Java and Spring, demonstrating my proficiency in back-end development and architecture.

SKILLS

- Programming Languages: C++, Java, C#, Python, HTML, CSS, TypeScript, JavaScript, PHP
- Frameworks: Angular, React, React Native, Spring, Expo, ASP.NET Core
- Databases: MySQL, PostgreSQL
- Tools: Azure, Git, Docker, Microsoft Office, Power Platform, Unit Testing, Class Diagrams

ACADEMIC PROJECTS

Software Engineering

- Lead a team of three students to design, implement, and test a hotel management software using object-oriented principles.
- Utilized unit testing to ensure each section of code worked properly and analyzed/refactored the existing code for improved performance using SonarQube.

Database Management Systems

- Developed ER diagrams to show relationships between entities in a dataset and designed/implemented a database to better record COVID-19 vaccination statistics.

OTHER WORK EXPERIENCE

Landscaping/Home Renovation **August 2021 - July 2023**

- Perform a wide range of landscaping and home renovation tasks for family and friends, including planting, mulching, painting, and basic carpentry work.
- Collaborate with clients to understand their vision and preferences, demonstrating a commitment to meeting their needs and expectations.
- Work diligently and efficiently to complete projects on time and within budget, even under tight deadlines and challenging conditions.