**Shahd Mustafa**

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# OBJECTIVE

Seeking an internship/job in software engineering where I can apply my strong technical skills, passion for innovation, and coursework knowledge in data structures, algorithms, and software development. I am committed to contributing to developing cutting-edge software solutions while enhancing my programming abilities in a dynamic and collaborative team environment.

# EDUCATION

**University of Michigan -- Dearborn |** B.S. Software Engineering Expected Graduation: Dec. 2024

* Relevant Coursework: Data Structures and Algorithms, Operating Systems, Database Management Systems, Discrete Structures and Computer Networks and Distributed Processing.

# SKILLS

**Software Tools:** Katolon, Git/GitHub, Atom, Enterprise Architect, Jenkins, WireShark, Android studio, oracle SQL developer, Azure, Microsoft Office, .NET

**Languages:** C++/C, C#, Java, Python, Html**/**CSS, JavaScript, Kotlin, SQL

# WORK EXPERIENCE

**Research Assistant,** Recommending Web Services Based on Quality of Information via Comparison Testing

University of Michigan, with Professor Song Sept. 2022 – Dec. 2023

* Developed a program that converts sentences to a word embedding matrix.
* Created a new dataset that obtains the sentence embedding matrix using data from 5 major cities.
* Contributed to the development of a program utilizing a dataset of 2000+ movie reviews to analyze whether each API correctly identified the text.
* Developed predictive software and analyzed the accuracy of the API in determining the text using majority voting.

**PERSONAL PROJECTS**

**Gardening Pixel Game Development** May 2023 - Present

* Designing the layout and characters using tiles for a gardening-themed pixel game.
* Wrote Python code to implement the game's functionality and mechanics, incorporating interactive features such as planting, watering, and harvesting plants in the game.

[**Personal Website**](https://shahdmu34.github.io/ShahdMustafa--personalsite/)  April 2023

* Designed and developed personal websites using HTML/CSS and JavaScript showcasing projects, resume, contact information, etc.

**ACADEMIC PROJECTS**

**Read and Review Mobile App** May 2023

* Developed and collaborated on an Android mobile app that allows users to search and review thousands of books by integrating the Google Book API using Kotlin and Android Studio.

[**Reliability and Availability Calculator**](https://shahdmu34.github.io/Reliablity-and-Availability-Calculator-site/)  May 2023

* Collaborated within a team of 4, to build a Reliability and Availability calculator site that serves as a valuable resource for users seeking to calculate essential metrics such as Mean Time to Failure (MTTF), Mean Time to Repair (MTTR), as well as reliability and availability. Using HTML, CSS, and JavaScript.

**Restaurant Database** April 2023

* Led a team of 3 to develop a comprehensive SQL database for a restaurant.
* A comprehensive set of tables was designed to capture all aspects of the restaurant, including staff, supplies, inventory, and more, including necessary attributes and key relationships.
* Successfully executed SQL queries and statements ensuring the integrity of the database design.

**Client Server Message** November 2022

* Java program has been developed to showcase socket programming for a client-server application, utilizing an internet domain. This application enables users to both receive and request a daily message, while also granting them the ability to modify the message content.

# CERTIFICATIONS

**Electronic Arts Software Engineering Virtual Experience Program on Forage** July 2023

* Developed and presented a compelling new game feature proposal.
* Enhanced the inventory system through the implementation of C++ programming techniques.