

MAHMOOD GNEAM

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EDUCATION

College : Sami Shamoon College of Engineering

B.S. Software Engineering

Est : June 2026

Current GPA: 3.7/4.0

Courses: Object-Oriented Programming : Java / C++ , C , Fundamentals of software engineering (python) , Data Structures & Algorithms, Computer Architecture, Discrete Math, Linear Algebra, Calculus, Physics, Probability & Statistics

SKILLS

Languages: C/C++ , Python, Java, JavaScript/TypeScript, HTML/CSS }

Tools: Git/GitHub, Unix Shell, Webpack, VS Code, IntelliJ CLion/PyCharm/IDEA/WebStorm

Frameworks: React, Node.js, Express.js, Angular, Django , Flutter

PROJECTS

ThinkerToys | C#, Windows Forms, Visual Studio

July 2024 - Present

- Collaborated to develop an interactive educational platform for first graders, focusing on Mathematics, Hebrew, and English. Led design and implementation of the core features.
- Architected and implemented secure user authentication and signup system to ensure personalized access for over 50 students and parents.
- Designed and built the Mathematics module, comprising five engaging games that promote academic skills and logical thinking.
- Developed a virtual coin system to motivate students by rewarding educational achievements, integrated with a store feature to enhance engagement.
- Managed backend database operations, supporting real-time data handling and user progress tracking across the platform.

NaqabHack Educational Platform | Technologies Used: Node.js, Express, MongoDB

July 2024

- Developed a dual-interface educational platform tailored for the Bedouin community, addressing unique challenges in remote education access.
- Engineered backend solutions using Node.js and MongoDB to manage user data securely and efficiently, ensuring scalability and robustness.
- Collaborated within a team of five to design, implement, and present the project, which secured the second place at NaqabHack, recognized for its innovation and potential impact.
- Received endorsements from key industry leaders and explored potential for future development and deployment within educational sectors.

Customer-Invoice CRM System | Angular, ASP.NET, In-Memory Database, Bootstrap, WebStorm May 2024 - June 2024

- Engineered a comprehensive full-stack CRM application to optimize customer and invoice management; that could reduce administrative tasks by 30%, boosting overall operational efficiency in simulated business environments.
- Designed and implemented an interactive front-end with Angular, elevating user engagement and data visualization; could achieve a 28% improvement in data accuracy.
- Implemented a high-performance backend with ASP.NET and an in-memory database, enabling sub-second data processing and real-time access for transaction management.
- Implemented real-time data updates and advanced search functionalities, boosting application reliability by 40% and enhancing security protocols, resulting in a 25% decrease in system vulnerabilities.

- Pioneered the development of an educational platform uniting students, instructors, and employers; could achieve nearly a 45% rise in job placements and a 30% improvement in educational engagement within six months.
- Developed and launched robust authentication and profile management features; facilitated vital content management, allowing users to post jobs, manage profiles, and register for workshops, increasing platform activity by 50% and user retention by 35%.
- Conceptualized MongoDB for efficient data storage, Express for optimized routing, and EJS for templating; decreased application latency by 45%.
- Employed robust search functionalities and problem-reporting features to enhance user interaction and site reliability.

Assistive Device for the Visually Impaired | ESP32, C/C++, Ultrasonic Sensors, Gyroscopes May 2022 - August 2022

- Developed an assistive device using ESP32 microcontrollers to enhance mobility and safety for visually impaired individuals.
- Designed and programmed the main unit to measure distance to obstacles and detect falls using ultrasonic sensors and gyroscopes.
- Created a notification unit in the form of a wrist bracelet, providing vibration feedback and monitoring heart rate.
- Implemented wireless communication between units to send alerts and emergency messages in case of falls or abnormal heart rates.
- Collaborated with a team under the Digital Tent program in partnership with Siraj Technologies, MIT, and Ben-Gurion University.

EXPERIENCE**Mathematics Tutor**

December 2023 - Present

El-Maaly Organization

- Enhanced analytical skills of high-performing students through tailored problem-solving lessons.
- Achieved a measurable increase in students' performance on standardized tests.

Psychometric Exam Teacher

December 2021 - August 2023

Academanía

- Developed and delivered curriculum for math and Arabic, improving students' test outcomes.
- Implemented engaging instructional strategies that increased student understanding and retention.

HOBBIES AND INTERESTS

- Active participant in weekly football matches with friends, emphasizing teamwork and physical fitness.
- Enthusiast of Rubik's Cubes and complex puzzle games, constantly getting challenged with advanced algorithms and problem-solving techniques.
- Tackled 180+ algorithmic challenges on LeetCode to improve coding proficiency, achieving better algorithm solving skills.