HUSSEIN MOHAMED SAAD

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COMMUNICATION AND INFORMATION TECHNOLOGY ENGINEER

A motivated and detail-oriented Communication and Information Technology Engineer with a strong academic background, ranking fourth in my class with a GPA of 3.35. Passionate about web development, with comprehensive knowledge in data structures, algorithms, and problem-solving. Proficient in HTML, CSS, JavaScript, Bootstrap, jQuery, Node.js, C/C++, and SQL databases. Seeking a challenging role in web development to leverage my technical skills and contribute effectively to dynamic projects, while continuing to grow and expand my expertise in the field.

TECHNICAL TRAINING

C/Embedded C Course | NTI

July 2022 - August 2022

- Gained proficiency in C programming language.
- Developed a School Management System using doubly linked lists.
  (https://github.com/Soonarated/School-Managment-system)

PROJECTS

EMBEDDED SYSTEMS PROJECT | FINAL SEMESTER

March 2024 - May 2024

- Learned AVR interfacing with ATmega328.
- Interfaced LCD, sensors, and implemented SPI and UART communication protocols.
- Developed a Multimeter using Arduino to measure resistance and voltage.

GRADUATION PROJECT: SELF-DRIVING CAR

October 2023 - July 2024

- Phase 1: Vehicle Control
  - Implemented steering, braking, and throttling control using PID controllers.
- Phase 2: State Estimation
  - Developed a state estimation scheme utilizing Extended Kalman Filter for tracking car movements and heading.
- Phase 3: Computer Vision
  - Built a traffic classification and detection model using CNN (not yet integrated in real-time due to resource constraints).
- Phase 4: Motion Planning
  - Designed algorithms to determine the optimal route using Dijkstra's and A* algorithms based on shortest path criteria.

THE DAILY JOURNEY | PERSONAL BLOG WEBSITE

June2024 - July2024

- using Node.js , bootstrap, Express.js and Embedded JavaScript

SKILLS

- Proficiency in C, C++ and Java
- Excellent problem-solving skills.
- Data Structures and Algorithms
- Object-Oriented Programming (OOP)

- Database and SQL
- Adaptability, ability to work under stress and Self-learner
- Proficiency in HTML, CSS, JavaScript, Bootstrap, git, github,version control, and ExpressJS

EDUCATION

BACHELOR OF COMMUNICATION AND INFORMATION ENGINEERING

Helwan University, 2019 - 2024

Grade: Excellant