Maria Alabdulrahman maria.alabdulrahmanips@gmail.com - Dammam, Saudi Arabia

Areas of Interest

- Software Engineering
- Computer Engineering
- Robotics
- Biotechnology

Portfolio Links

LINKEDIN: https://www.linkedin.com/in/maria-alabdulrahman-843165109/

GITHUB: https://github.com/mariaalabdulrahman

Education

- **3.98/4**, **Bachelor of Science**, Prince Mohammad Bin Fahd University
  - **Double Major** in **Computer Engineering** and **Software Engineering**
  - ABET Accredited Program
  - Expected graduation date: May 2024
  - Dean's Honor List Student

Experience

June 2022 – August 2022: **Robotics Engineer Intern**, Robotics Lab at Prince Mohammad Bin Fahd University.

Skills/Tools

Electronics and Microcontrollers	Arduino, Raspberry Pi
Web Development	HTML, JS, jQuery, CSS
Languages	Java, Python, JavaScript
Productivity Tools	Word, Excel, PowerPoint, Overleaf

Projects

- **Haptic VR glove for Unity using Arduino**
  - A glove was constructed using IMUs and flex sensors which collected hand movement data
  - The data was fed to a Unity environment, where a virtual hand reflects the hand movement data collected from the glove
  - Events in the game result in haptic feedback on the glove
- **Inventory Management System using Deep Learning (No QR/Barcodes)**
  - Items are recognized by a raspberry pi through a live video feed from a webcam
  - Users can check-in and check-out items. The inventory database is updated accordingly

- - Inventory, stock, check-outs, and user information is displayed on a web application.
    - New items can be registered by an admin using the 'Register Item' feature. Images of new items are captured which are used to retrain the deep learning model
- **Electronic Xylophone with LCD using Arduino**
    - A system that is designed to teach beginners how to use a xylophone
    - An array of momentary switches correspond to a note on the xylophone
    - LCD displays the note played by the user
- **Robotics Lab Stock Management Web Application**
    - A NodeJS based server handles GET and POST requests from users that borrow items from the lab
    - Displays stock information of robotics lab
    - Gives controlled access to admins to update stock information

Research
Interests

- Biomedical engineering
- Robotics
- Machine learning
- Cybersecurity
- IoT
- Computer Networks

Achievements & Awards
- **Networking Academy course Cybersecurity Essentials,** Cisco (2022)
- **Dean's Honor List**, PMU (2021-2022)
- **International Baccalaureate Diploma,** IBO (2020)

Extra-Curricular Activities
- IEEE Member
- IEEE Robotics and Automation Society Member
- Model United Nations
- Basketball
- Volleyball
- Spanish club
- Chinese club