LinkedIn

Mohamed Eyad Sayed

An enthusiastic Mechatronics undergraduate engineer who is seeking for new challenges and opportunities, that lead to an improvement in the scope of experience in my current area of expertise or gaining new experience.

PERSONAL INFORMATION

Address: East the Academy, New Cairo, Cairo, Egypt
Mobile phone: +201286868154
E-mail: mooeyad@gmail.com
Date of Birth: 23/08/2000

WORK EXPERIENCE

2017–2019 **Teaching Assistant**

Mathematics Teaching Assistant at IGCSE/ A-levels

EDUCATION AND TRAINING

2018–Present **Faculty of Engineering - Ain Shams University**

Specialization: Mechatronics Engineering and Automation
Cumulative GPA: 3.5
Anticipated graduation: 2023

01/2020 – 05/2020 **University of Central Lancashire (UCLan), United Kingdom**

Specialization: Mechatronics and Intelligent Machines
Fully funded exchange program supported by Erasmus+
Grade: Distinct

2015–2018 **IGCSE**

The English School in Cairo ESC
A-levels: Mathematics A
GCSEs: 7 A* - 1 A

02/2022–07/2022 **ASmarine Academy**

Training which covered:
-Python basics
-GitHub
-Arduino programming for sensor & actuator interfacing
-MATLAB basics
-Introduction to ROS & Gazebo
Final project: Navigation through turtlebot3 home world using rospy & Gazebo

07/2021–01/2022 **Embedded System Diploma**

Course covered:
-Basic Concepts of Embedded Systems
-C Programming
-AVR Microcontrollers Interfacing (Implement all the drivers)
-Embedded C
Supervised by Eng. Mohamed Tarek

2019 **iChallenge'19 Training**

Robotics training organized by iHub at Faculty of Engineering - Ain Shams University

2020 **PLC – Industrial Automation Summer Trainee @Schneider, Egypt**

- PLC Basic digital and analog I/O
- Programming Using Ladder diagram language.
- Integration between PLC & HMI
- Industrial Communication (TCP/IP)

Final projects: developing a program to control the selection process in a production line, and an automated Color Mixer.

PERSONAL SKILLS

-Good **communication skills** gained through my experience as a Teaching Assistant.
-Excellent **team management** and **presentation skills** gained through my experience in multiple of group presentations.
-Self learning -Attention to details -Willingness to learn

Languages:

-Arabic: Mother tongue
-English: Advanced
-German: Fair

Computer Skills:

- ROS
- Arduino -C++
- Embedded C
- Python -OpenCV
- LabVIEW -MATLAB
- Altium Designer -Proteus
- Inventor - SOLIDWORKS

PROJECTS

May 2022 **Robusta – Service Robot**
Participated in a team to design & manufacture a fully autonomous service robot in coffee shops. Implemented the fastSLAM (Gmapping Package in ROS) to map the environment and navigate through it using the Navigation Stack.

- PID speed control on the DC motors were implemented on the Low-Level Control (STM32)
- SLAM and path planning were implemented by using 2D Lidar (Rplidar) interfaced with Jetson Nano
- Emotion recognition of the customer using modern techniques of computer vision.

Tools used: Inventor, SolidWorks, ROS, Gazebo, Rviz
GitHub: https://github.com/ASU-Robusta
Grade Achieved: A

May 2022 **Simulation of 6 DOF Robotic Arm on Gazebo**
Controlling a 6 DOF Robotic Arm using ROS platform with Gazebo, Rviz and Moveit Simulation environments.
Tools used: ROS, Gazebo, Rviz, MOVEit
GitHub: https://github.com/mohamedeyaad/6DOF_Robot_Arm_Control_in_ROS

Jan. 2022 **Traffic Light Systems**
Using timers and interrupts in the cortex M4 and tivaware based to develop a traffic light system
Tools used: IAR Systems, TivaC (arm cortex m4 based)

Feb. 2021 **Automated Marble track**
Participated in a team, in Introduction to Mechatronics course, to design and manufacture a complete autonomous marble track based on cam lifting mechanism and autonomously detect, then shoot the different balls that set by the user through a mobile app which choose the different color ball.

- Tools used: Inventor, Arduino IDE, Proteus
- Grade Achieved: A-

Jan. 2021 **ALU**
By applying the concepts of the logic design, I was able to design and build an arithmetic logic unit using a number of ICs. ALU that performs: 4-bit adder/subtracter/increment/AND/OR operations
Tools used: Logisim

Sep. 2020 **Mechanical Design of Can Crusher**
Participated in a team to design, assemble and draw a full working drawing for a Can Crusher. Tools used: Autodesk Inventor

May 2020 **Stepper Motor GUI**
Applying the concepts of electromechanical systems to develop a GUI to control the speed & position of 2 stepper motors by Arduino microcontroller interfaced with LabVIEW.
Tools used: LabVIEW, Arduino IDE

May 2020 **Autonomous Guided vehicle**
Develop an autonomous robot car that navigated using color detection by using image processing through LabVIEW with an interface with Arduino.
Tools used: LabVIEW, Arduino IDE