

# Mohamed Tarek Hassan

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## SUMMARY

Mechanical engineering graduate with extensive experience in mechatronics engineering. Demonstrated ability to design and create automated systems that efficiently manage the production process. Skilled in the use of CAD/CAM software and hands-on experience in the integration of electrical and mechanical components. Applying for a position as a Mechatronics Engineer to develop innovative solutions and improve existing systems.

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## EDUCATION

### Bachelor of Mechanical Engineering (mechatronics)

Arab academy for science and technology • Sheraton Al Matar, Cairo Governorate 11757 • 2023 • GPA : 3.3 very good

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## CERTIFICATIONS

### Embedded Systems Diploma

Amit Education Center • 2022

Graduated with grade 97%

### Internship in Atrium City Gate Contractors

Rehab Branch: BLD 8 Administration Buildings, Al Rehab City – Cairo – EG • 2020

planning and analysis of the aspect of the construction that involves mechanical works and ensure the absolute compliance of suppliers in supplying the materials and machinery needed on-site.

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## PROJECTS

### Autonomous Vehicle for Underwater Surface Cleaning

Arab academy for science and technology • September 2022 – July 2023

• A wiring diagram represents the physical connections and physical layout of an electrical system or circuit.

### SCARA Robot using MATLAB and Arduino

Arab academy for science and technology • April 2023 – May 2023

• Programmed and tested a SCARA robot to automate material handling tasks, using MATLAB and Arduino.

### Robotic Arm of three degree of Freedom using two Arduinos & I2C Communication protocol.

Arab academy for science and technology • October 2022 – November 2022

• Developed and implemented a robotic arm with three degrees of freedom using two Arduinos with the I2C Communication Protocol, resulting in a 30% reduction in arm movement execution time and improved accuracy to less than 1 mm precision.

### Smart house automation using Arduino & Lab View.

Arab academy for science and technology • March 2020 – April 2020

• Programmed, debugged and troubleshot the code for Arduino Uno and programmed functions on Lab View incorporating sensor data to create a smart house automation system.

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## INVOLVEMENT

### Roben Electric Cars

Arab Academy for Science and Technology • May 2022 – June 2023

• Constructed robotic vehicle subsystems including chassis, wheels, and motors, utilizing Functional Mock-up Interface (FMIBase) and Simulink to establish communication between heterogeneous systems for improved efficiency.

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## SKILLS

Languages: ENGLISH: Fluent , Dutch: Beginner

C programming, Python, Matlab, LabVIEW, Autodesk AutoCAD, Autodesk Inventor, Matlab, Software: Orcad Schematic, Electrical Schematic, Wiring Schematic