Yousef Ahmed Mohamed Gomaa

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**Gender: Male Date of birth: 27 Aug, 2002 Address: Dakahlia Governorate**

**Summary**

Enthusiastic mechatronics engineering student specializing in embedded systems and automation. Excited to contribute to projects and gain hands-on experience in these fields. Actively seeking an internship to apply and enhance my skills, with a keen interest in opportunities within the educational sector as well.  
**Education**

* **Bachelor of engineering, Mansoura University**, **Al Dakahlia**, **Egypt (Sep 2021 – May 2026)**

**Major: mechatronics engineering GPA: 3.88**

**Computer skills**

- Excellent command of Microsoft Office applications (Word – PowerPoint – Excel).

- Programming (C,C++ , Python , Git ,Matlab/Simulik )  
- electronics (PCB, basic electronics , proteus, easyeda)

# Activities

# - Embedded Systems Intern at ITI (Jul 2023 – AUG 2023)

Gained hands-on experience in coding, testing, debugging, RTOS integration, microcontrollers, and communication protocols.

# - brainy n bright intern and instructor (May 2023 - Sep 2023)

# Expanded technical skills in Arduino, C, Python. experience in teaching and mentoring young students.

# - Software head in luminous (SEP 2023 – MAY 2024)

# Expanded technical skills in Arduino, C, Python, Proteus, and more; fostered communication, collaboration, and problem-solving. experience in teaching and mentoring university students

# Courses

# Arduino

# python

# Embedded system

# C

# Data structure

* Electronics
* Matlab
* Simulink

**Certification:** https://drive.google.com/drive/folders/16jFVQXM-G3yjEyPhwM2Eb7kJjXXUCYzb

**Projects**

**- sumo:**

In this project, I served as the project manager, leading the team in creating a sumo robot. Our efforts culminated in participating in a sumo robot competition last year.

**- CNC:**

My role in the CNC project focused on software development. We created a CNC system on an RC car, controlling it with a controller using an NRF module. The tools we used included Arduino Uno and Nano, Arduino IDE, NRF module, GRBL, and Inkscape.

**- Self balance:**In this project, my role was to manage the software, utilizing the MPU6050 sensor, PID control, and Arduino IDE. **- Smart home:**Led the development of a smart home system, overseeing both software and hardware integration. Utilized IR sensors, an LCD with I2C module, a comprehensive fire detection system, a DHT11 temperature sensor, and intelligent light detection. Ensured robust security with a sophisticated password mechanism.   
  
**-RC car Bluetooth controlled:**In this project, my role was to build it from scratch, focusing on software development and hardware connections. I utilized Arduino IDE, a Bluetooth module, a motor driver, and DC motors.  
  
**-Modeling of industrial bump:**   
Led project modeling bump industrial system, designing electric circuit. Used piezoelectric elements for vibration detection, capacitors for voltage storage, springs for optimized vibration capture. Cantilever design enhanced vibration intensity. Result: versatile generator for disaster relief, green energy, and soundwave conversion.  
 **- obstacle avoiding RC car**using Arduino, ultrasonic and servo motor. **- line follower RC car**using Arduino and IR sensors in addition to a normal RC car component. **Languages**

1. Arabic: Native speaker

2. English: B2