

Omar Elghamry

Personal Information:

Email: omarsherifelghamry@gmail.com

LinkedIn: [LinkedIn](#)

GitHub: [GitHub](#)

Codewars: [Codewars](#)

Objective:

Motivated Computer Science student with strong skills in **embedded systems**, C, C++, Python, Basics of machine learning, (OOP), data structures, and software development. Passionate about integrating software and hardware to create innovative solutions. Seeking to contribute my knowledge and experience to challenging projects that leverage both software and hardware integration.

Education:

Bachelor of Science in Computer Science

Misr University for Science and Technology, Expected Graduation: 2026.

GPA: 3.89.

Embedded Standard Diploma

Edges, 2024.

Skills:

- **Programming Languages:** C, Embedded C, Python (Pandas, NumPy, Regression, Classification), C++, OOP.
- **Microcontrollers:** ATmega32, AVR.
- **Protocols:** UART communication, I2C, SPI.
- **PCB Design Tools:** Proteus.
- **Peripheral Integration:** Keypads, LCDs, PIR sensors, EEPROM.
- **Data Structures & Algorithms:** Linked lists, sorting, and searching.
- **Tools:** Git, GitHub, Real-Time Operating Systems (RTOS).
- **Soft Skills:** Problem-solving, quick learning, teamwork.

Projects:

- **Dual Microcontroller-Based Door Locker Security System Using Password Authentication**
 - Developed a secure door control system using two microcontrollers with password authentication.
 - Integrated components: EEPROM, H-bridge motor control, PIR sensor, and buzzer.
- **Smart Home Automation System**
 - Developed an ATmega32-based system managing lighting, temperature, and fire detection for home automation.
- **Digital Stopwatch Using ATmega32**
 - Created a digital stopwatch with real-time adjustments and multiple modes like increment and countdown.
- **Connect4 Game (Python)**
 - Developed an AI-driven Connect4 game using minimax and alpha-beta pruning.
- **Web Scraping for YALLA KORA (Python)**
 - Scraped and extracted football data using requests and BeautifulSoup, saving data to CSV.
- **Additional Projects:**
 - I have developed many other projects, which are available on my [GitHub](#). These projects showcase my proficiency in embedded systems and programming, reflecting my dedication to continuous learning and innovation.

Interests:

- Travelling, Soccer, Volunteering, Gym & Fitness.

Languages:

- **Arabic:** Native.
- **English:** Very Good Proficiency.