# Haya Mahmoud Abdallah

Computer engineering student at EUI

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### **Profile**

Embedded systems and IoT engineer with expertise in **microcontrollers**, **data analysis**, **and web development**. Experienced in building **end-to-end solutions** from firmware to cloud dashboards, with a track record of success in **international hackathons and research competitions**. Skilled in translating **complex technical concepts into practical applications** across healthcare, automation, and data-driven systems.

### **Education**

#### **Bachelor of Engineering, Computer Engineering**

Egyptian University of Informatics (EUI), New Administrative Capital, Egypt

Expected Graduation: 2029

CGPA: 3.89 / 4.0

Scholarship: Full Academic Excellence Scholarship

#### **STEM High School Graduate**

STEM School, Ismailia, Egypt

Graduated: 2024 | Score: 108% (Ranked among Top 200 students nationwide)

### Technical Skills

- Programming Languages: C, C++ (including Embedded C), Python, JavaScript
- Hardware & Electronics: Arduino, AVR microcontrollers, IoT systems, circuit design
- Data & Visualization Tools: Excel, SQL, Power BI, Tableau, Python for Data Analysis (Pandas, NumPy)
- Tools: MATLAB, GitHub, Arduino IDE, Data Camp (AI)
- Soft Skills: Leadership, public speaking, project management, time management, teamwork.

# **Training and Certifications**

- NTI Microcontrollers Training Program NTI (2025)
  - o 120 hours (90 technical + 30 soft skills)
  - Covered embedded systems, microcontroller programming, peripheral interfacing, circuit design, IoT integration, and core MCU concepts.
- SAIT Web Development Fundamentals Bootcamp SAIT (2025)

2 months. Covered:

- o HTML, CSS, and JavaScript fundamentals
- o Responsive design and modern front-end practices
- o Converted Figma UI/UX designs into fully functional websites
- Data Analysis Diploma KIMIT Academy (2025)

4 Months. Gained practical skills in:

- o Excel & Power BI for data visualization and reporting.
- o Python & Python for Data Analysis (Pandas, NumPy) for statistical and exploratory analysis.
- o **SQL** for database querying and management.
- o **Tableau** for business intelligence dashboards and interactive analytics.

# **Achievements and Projects**

• SolveThe17 Hackathon Winner, IEEE EUI SB (2025)

**1st Place** for HealthGuardian, an IoT-based COPD monitoring bracelet.

- Integrated MAX30100 (SpO<sub>2</sub>/HR), ADXL345 (activity detection), and AQI API for real-time health alerts.
- o Developed a Blynk IoT dashboard for remote monitoring.
- o Aligned with UN SDGs 3 (Health) and 11 (Sustainable Cities).
- Smart Home Automation System (2024)
  - Arduino-based lighting & security automation project.
- **ISEF National Finalist** (2023)
  - Developed an eco-friendly alternative to plastic bags using pomegranate peels in environmental engineering category.
- S.T. Yau High School Science Award, Physics (2023)
  - o Research on phonon energy & momentum in semiconductors.
- Undergraduate Research Forums Nile University (2025, 2022)
  - o IoT health-tech competition (2025) & hydrogen energy project (2022).

## **Leadership & Experience**

- Vice-Head of Business Development Committee, RALLY EUI (2025)
  - Contributed to entrepreneurship events, recruitment strategies, and a two-day boot camp with 35+ universities in Port Said.

### **Awards & Honors**

- Egyptian National Rowing Championship (2024, 2023)
  - o Silver Medal; consistently ranked in Top 4 in 8 national competitions.
- Full Academic Excellence Scholarship, EUI (2024)
- SolveThe17 Hackathon Winner IEEE EUI SB (2025)

### Languages

• **English:** Fluent (IELTS Certified)

Arabic: Native