# YUSUF HEGAZY

Nasr City, Cairo, Egypt

🜙 +201010588770 🔀 yusuf@hegz.me 🔚 linkedin.com/in/yusufhegazy 🞧 github.com/hegzploit 🛠 hegz.me

# **EDUCATION**

## Egyptian Academy for Engineering and Advanced Technology (EAEAT)

July 2018 - 2023

Bachelor of Electronics and Communication Engineering

Cairo, Egypt

**Al-Farouk School** 

2005 - 2018

Primary, Preparatory and Secondary Education

Cairo, Egypt

### **SKILLS**

Languages: Python, C, Assembly, Bash, Matlab, OCaml, LaTeX, JSON, awk Tools: Vi, tmux, GDB, Zsh, Git, Cron, curl, jq, KiCad, Proteus, Logisim

Technologies/Frameworks: Linux, SSH, HTTP, MQTT, Flask, Heroku, Docker, Pandas

# **EXPERIENCE/PROJECTS**

### **Capture the Flag Competitions**

- HackTheBox 5 Machines rooted.
- TryHackMe 17 Completed Rooms
- Participated in multiple global and local CTFs with multiple teams, some of the writeups are posted on my blog.
- Developed binary exploitation challenges in the OxL4ugh CTF

## **Cybersecurity Education** | YouTube, Davinci Resolve, Photoshop

April 2020 - Present

- · A series of videos on low-level security was recorded, It involved memory corruption and buffer overflow attacks and their exploitation.
- Videos were recorded in Arabic and edited using Davinci Resolve, Photoshop was used to design the thumbnails.
- A talk was given introducing buffer overflow to the masses, It included a crash course on x86 assembly and memory inner workings, It was edited and uploaded on YouTube for archiving purposes.

## **IOT Plant Watering** | MQTT, ESP8266, MIT AI2, KiCad

December 2021

- Developed a plant watering system connected to the internet of things that reported the plant's soil conditions and took action depending on the current weather/temperature.
- Designed the communication system using MQTT protocol where a client used an android application to interact with the microcontroller (ESP8266) querying sensor information and controlling the system's actuators.
- · Designed the schematic and PCB in KiCad and fabricated the design using the photoresist dry film method and etching.

## **Numerical Methods Solver** | *Python, Flask, Heroku, Bootstrap*

May 2020

- Developed a web application that solved equations using various numerical methods from our numerical methods course.
- Python's flask framework was used and the web app was deployed on the cloud using Heroku and connected to my subdomain.
- Front-End was designed using bootstrap.

## **EXTRACURRICULAR ACTIVITY**

## **EAEAT Cybersecurity Circle**

March 2022 - Present

• Formed a community of cybersecurity enthusiasts with a goal of introducing them to security.

Cairo, Egypt

• Participated together in multiple CTFs and hosted multiple sessions where a lot of basic concepts were established.

**Arrow Team** May 2019 - Present

Student Team Captain

Founder

Cairo, Egypt

- Collaborated with a team of talented individuals toward the manufacturing of electric vehicles to compete in various national and international student competitions.
- Designed the vehicle's HMI using communication protocols and data acquisition of the multiple sensors in the vehicle.
- Assisted in designing and deploying the vehicle's wiring systems.