

AHMAD ABU HOUSSAINI

COMPUTER ENGINEER AND A SCHOLARSHIP GRANTEE

As a dedicated Computer Engineering student and a Turkish scholarship recipient, driven by the responsibility of being a candidate of an auspicious Teknofest team (the largest aerospace and technology competition in Turkey), collaborating with specialists in the fields, the networks and expertise gained through my academic years, followed by the management of a real-life project, I have developed the necessity to focus on optimizing a set of skills in coding, designing an optimized workflow, eliminating workspace hurdles, and boosting the workspace network to speed up productivity and product availability on demand if needed.

LEADERSHIP

FILLING THE GAPS:

Took full responsibility when we lacked hardware resources during our Teknofest project compensating it with software-based solutions to provide high level optimization solutions.

MY AREA OF EXPERTISE:

Observed the division of tasks between my colleagues during extracurricular activities outside and inside my college, dealing with sections I bear to have knowledge in, maintaining a worry and confusion free environment.

EXPERIENCE

HEAD OF COMPUTERVISION MISSION IN MY TEKNOFEST TEAM

Designed a highly accurate real-time UAV detection system, utilizing a python pipeline and OpenCV library and YOLO AI model to keep track on aerial enemies and manage a successful lock on pursuit simulating real scenario defense mechanism.

1ST PLACE WINNER OF A MAJOR NATIONAL RASPBERRY PI COMPETITION IN BEIRUT DIGITAL DISTRICT

Successfully my team lead by me managed to grab the first place in a major Raspberry Pi competition held in Beirut Digital District. By utilizing old parts of a speaker, we converted the magnetic field from the speakers coil into electricity for a LED. When applied in real life on a bigger scope it can be used to light up the infrastructure in the country's streets and big firms and hospitals. Reducing the necessity of diesel fuel-based generators and aiding with utility expenses.

POWER EFFICIENCY METER

By using an esp32 I was capable of designing a smart power meter that measures power consumption in real time. This can be used to manage a company's energy resources, cutting down

on costs, and help predict when a machinery is about to break down based on power anomalies.

SKILLS

- **AI & Computer Vision:** YOLO AI model, OpenCV Framework, Multi-Object Tracking, Image Pre-processing & Filtering
- **Software Engineering:** Python, NumPy, Advanced Data Structures, C++ Architecture, Java, Git Version Control
- **Development Environments:** PyCharm, VS Code, Jupyter Lab, Arduino IDE (ESP32)
- **Hardware & Digital Design:** Circuit Design & Analysis, Digital Logic Systems, Electrical Connections

EDUCATION

HIGHSCHOOL BACKGROUND

Graduated from Rafic Hariri Highschool a prestigious highschool in my hometown, with an honors degree, excelling in subjects mainly like Math, Physics, Biology and Chemistry.

A SCHOLARSHIP WINNER IN TURKEY

After being granted a scholarship to study abroad in Turkey, I'm currently doing my bachelor's degree in Manisa Celal Bayar University in Computer Engineering, participating in academic workshops seeking experience from experts during on-campus seminars further expanding my network for a broader understanding of the business.

ACTIVITIES

MULTILINGUAL & TECHNICAL SELF-STUDY: Use YouTube and online platforms to learn new spoken languages, while simultaneously using Udemy to pick up new programming languages and dive deeper into Python and OpenCV.

HANDS-ON HARDWARE TINKERING: Spend personal time experimenting with the ESP32 microcontroller, writing custom code to test its limits and building side projects to see how hardware and software connect.

TECH COMMUNITY ENGAGEMENT: Regularly attend on-campus engineering conferences and meetings to learn directly from professionals about where the tech sector is heading and how the industry works.

CONTACT

- ☐ **Location:** Manisa, Turkey
- ☐ **Email:** ahmadabouhoussaini86@gmail.com
- ☐ **Phone:** +90 5315909180
- ☐ **LinkedIn:** linkedin.com/in/ahmad-abou-houssaini-024143207
- ☐ **GitHub:** github.com/Asta48-look