

# Ahmed Hamdy Mahmoud

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## Skills

C, C++, Rust, Java, Android, Python, git, Linux, Machine learning, Intel 8051 micro controller, Keil, Arduino, C#, Angular2

## Projects

### Assembler for SIC/XE machine

Main target of this project is to learn and use a new language in such a short amount of time. **Rust** is a systems programming language by Mozilla that provides C capabilities plus memory and thread safety guarantees

### Shixy the robot

At my internship at TMentors Writing software that controls a remotely operated robot using **C#** and **WPF** and communicating with the **Arduino** that controlled the motors.

### File server

Building a reliable protocol on top of UDP using **C++**, This was the final project for the Computer Networks course. I learned about modern **C++** and using its **std** library and its idioms such as **RAII** and move semantics. I chose **C++** as a language as I wanted to learn it through this period.

### Event planning system for IEEE | AlexSB

Aiming to learn **Angular2**, this project is used to organize the time slots for the volunteers in a given event, taking care of the collisions that might occur while allocating the volunteers.

### Arduino Network Manager

Using **Java**, this project was created for a client to control a network of **Arduinos**, The program monitors the state of the **Arduinos** in the network and sends them commands that are received by sketches running on the **Arduinos**

## Activities

- **Microsoft Student Partner** 2015 – 2016 helped in spreading new technologies on campus and providing educational mails
- **IEEE | AlexSB volunteer** Software & Technical Committees, Graphics - 2016 , instructed C and Arduino courses
- **Programming & Robotics instructor** at Protons by IEEE AlexSB for 3 years - Arduino, C# and Python
- **Human Computer Interaction** workshop at *STRA City* we created a prototype for a tele-presence robot (Arduino, RPi, WebRTC, MQTT) it was more of a research experience where we applied user centric design principles
- **Made In Alex Robotics Team** joined Minesweepers competitions and created a robot that was remotely operated using Arduino and nRF and sent data using serial to the **C#** program on pc
- **AIESEC** Worked with interns from other countries for a project to help orphans learn English and Math
- Member at Made In Alex robotics team
- **Batch representative** 2015 – 2016 solving problems for the batch inside the campus
- Arduino blogger on Hackster.io

**Online profiles** *GitHub* | Hackster | *LinkedIn* | *Facebook*