# Ahmed Hamdy Mahmoud

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### Skills

C, C++, Rust, C#, Angular 2, Java, Android, Python, git, Data structures, Linux

## **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

I was lucky to have such a cool internship at TM entors Writing software that controls a remotely operated robot using <code>C#</code> and <code>WPF</code> and communicating with the <code>Arduino</code> that controlled the motors . I learned a lot about design patterns and clean software design through that year

#### 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
- 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