Ahmed Hamdy Mahmoud

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Skills

C, C++, Rust, Java, Android, Python, git, Linux, C#, Angular2 , Machine learning

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 `Arduino`s, The program monitors the state of the `Arduino`s in the network and sends them commands that are received by sketches running on the `Arduino`s

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*