# Ahmed Hamdy Mahmoud

3rd year student Faculty Of Engineering, Alexandria University Computer and Communications Engineering Expected graduation year 2018

Contacts ahmedhamdyau@gmail.com | +201148424331

#### Skills

Rust, C, C++, Kotlin, C#, Java, Python, git, Linux, Machine learning, Angular2, Gulp, Nodejs

# **Projects**

I use projects to learn new languages and technologies in a short amount of time, this is pretty much fun and challenging

## Assembler for SIC/XE machine

Using Rust, this program creates object code from input assembly file, it has unit tests, a robust error checks and modular design

# Shixy the robot

At my internship at TMentors Writing software that controls a remotely operated robot using C# and WPF using Prism and using component based architecture, containers and interface dependencies. Subcomponents were a camera viewer, slide show, socket connector to the pilot's side.

#### File server

Using modern C++, I implemented GoBackN algorithm on top of UDP to make reliable file transfer, it could also server multiple clients each one on a separate thread.

## **Bash Beautify**

A simple vscode extension to format bash script in Nodejs that spawns a child python script process to format the current source file, find it on the marketplace

## Arduino Network Manager

Using Java, this project controls a network of Arduinos, The program monitors the state of the Arduinos in the network and sends and queries the state of them

#### SMS AdBlocker

Using Kotlin after Google announced its support for Android, this project aims to block annoying SMS Ads by the service providers and filter them away

#### **Power Tray**

Using C# I created this gadget when I was a windows user to change the power settings in a succinct manner directly from a task bar tray. This gadget was selected to be featured on Softpedia

#### 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
- Arduino blogger on Hackster.io