Ahmed Hamdy Mahmoud

3rd year student Faculty of Engineering, Alexandria University Computer and Communications Engineering Expected graduation year 2018 Contacts: ahmedhamdyau@gmail.com | +201148424331

GitHub | LinkedIn | Hackster

Objective: I'm that kind of person that's stuck between software and embedded systems engineering, Who is a code addict and loves SOLID code. I'm mostly into lower level programming that interfaces more with the operating system than user applications. And I love teaching as it makes me feel sky high and gives me a sense of meaning and purpose. I love opensource and sharing so all my personal projects are publicaclly available on GitHub.

Skills

Java, Rust, C, C++, Kotlin, Python, git, Linux, Machine learning, Angular2, Nodejs, Bash scripting, C#, MCS51 Microcontrollers, Arduino, NodeMCU, Raspberry Pi

Experience

Software for a remotely operated robot (C#, WPF)

Designed and implemented a solution for a remotely operated advertisment robot during a my one year internship at <u>TMentors</u>. Using C# and WPF.

Assembler for SIC/XE machine (Rust <3 && Travis)

A team-project that transforms assmebly code into SIC/XE binary and keeping the code up to the tests with Travis

File server (C++)

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

Bash Beautify a VSCode Extension (nodels)

I didn't find a simple enough beautifier for bash scripts so I decided to build my own bash script in Nodejs that spawns a child Python script process to format the current source file, find it on the marketplace. I used Gulp as the build system

Arduino Network Manager (Java && Arduino)

Designed and implemented a solution that's used to manage a set of Arduinos in a factory thorugh a JavaFx GUI interface and Arduino.

Power Tray (C#)

Built as a gadget to facilitate power plan switching and using windows APIs. It was selected to be featured on <u>Softpedia</u>

Activities (Teamwork, Teaching, Blogging, Culture exchange)

- Computer Science and Robotics educator for mid/high school students at <u>Protons</u> for 3 years Arduino, C# and Python
- Microsoft Student Partner 2015 2016
- As a volunteer I was an Instructor for C and Arduino courses, IEEE | AlexSB
- Made in Alex Robotics team member (competitions: IRC, Minesweepers)
- Arduino blogger on Hackster.io (/sharkam02)
- Former AIESEC member, Participated in receiving global interns in a charity program in Alex.