# **Mohamed Kasem Smaili**

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Nationality: Brazilian

### **Education**

2019- Present Lebanese American University, Byblos, Lebanon (CGPA:3.4/4)

- Bachelor of Engineering in Mechatronics Expected Graduation: 2023
- Honors list (GPA>3.2): Spring 2019, Fall 2019

2018 Omar El-Mokhtar Educational Center, West Bekaa, Lebanon (CGPA 16.18/20)

• Lebanese Baccalaureate, Life Science

## **Technical Skills**

- Expert: Java, Python, MS Office, SolidWorks, MATLAB, LabView, Controllers, LTSpice.
- Beginner in: AutoCAD, Computer Vision.

#### Languages

• Native Arabic and Spanish, Fluent in English, and Beginner in Portuguese

#### **Work Experience**

#### **Tutor At Geek Express - Lebanon:**

• Equip students with technology skills helping them to develop apps, video games...

#### **Private Tutor - Lebanon**

• Private tutor for middle school and high school in Math, Physics, Biology and Chemistry

## **Coursework Projects**

## **Trach disposal robot (4/2022-5/2022)**

- We aimed at designing a robot that consists of a rover and a hand mounted on it, that whenever it detects a trash, it goes catches the trash with the hand puts it into a box
- It utilizes OpenCV, TensorFlow, fuzzy logic control, Raspberry PI, PI camera, motor driver, rover, \$-degree of freedom robotic arm

## Robotic Hand (4/2022 -5/2022)

- Designed a robotic hand that copies the movement of the fingers of real hand
- Setup included Robotic hand, Servo Motors, Arduino, camera, OpenCV, and media pipe to facilitate the communication of hardware and software

## Card Detector (11/2021-12/2021)

- Managed to design a card detection machine to automatically detect card suits
- Realized reduction in man hours required to detect different suits mainly in casinos
- Setup included DC Motors, rovers, H-Bridges, Power Supply, PI, PI Camera, and computer vision to facilitate the communication of hardware and software

# **Animal Tagging System (04/2021-05/2021)**

- Designed a machine to track tagged animals in farms aimed at assisting large farms and/or governments to keep track of cattle or endangered species
- Utilized LabView, MyRio, and Solid works to design and setup the machine

## **Machine Money Converter (11/2020-12/2020)**

- We aimed at designing a machine which converts money from Lebanese Lira to Dollars
- In this project we had to deal with different electronic devices to accomplish our goal