#### Mohamed Mostafa Soliman Mostafa

## Personal information

Address: Shoubra-Elkheima qalyubia

Email: mohamed.mostafa.std5@cis.asu.edu.eg

phone:01142521577

Links: Gihub | Linkedin | Kaggle | Codeforces

## **Education**

Faculty of Computers and Information Sciences Ain Shams University [2015 - 2019]

Fourth year - Scientific Computing Department - Good for past three years

## **Interests**

I have good knowledge in software Engineering, also I have interest in machine learning and computer vision fields.

# **Development Skills**

- Programming Languages:
  - C++ | C# | Python | matlab[novice] | Prolog [Novice]
- General Concepts
  - Object Oriented Programming | Data Structures | Algorithms (analysis & Design) | Data Base Design | File Organization | Assembly | Image Processing | Operating Systems | Computer Graphics
  - Math (Calculus | Linear algebra | Discrete Mathematics | Differential Equations | statistics | probability)
- Databases
  - SQL | Basics in Oracle 11g [novice]
- Data Science
  - Machine Learning (Linear regression , Logistic regression , Support Vector Machines , KNN )
  - Deep Learning (Convolutional Neural Network, Recurrent Neural Network)
  - Libraries: Tensorflow [novice] | keras | numpy | Pandas | matplotlib
- Computer Vision
  - Segmentation | Object Detection-recognition | Object Tracking |
     Filtering
  - **Libraries**: opency
- Development Tools
  - Microsoft Visual Studio | Pycharm | Jupyter Notebook | Visual Prolog
     | Ecllipse | Brackets
- Web Skills
  - Html / CSS

## **Projects**

- Scientific Calculator [2015] -with Team
  - <u>C++</u> Console Application that make some mathematics functions without builtin functions-like (Trigonometric functions and its inverse, exponential function, convert number from any base to another, calculate fraction power, etc)
- Music CD's and instruments rental System [2016] -with Team

<u>C++</u> Console application that rent CD's and instruments such that client apply for CD or instrument and once they are available he/she can rent it

#### - E-Government System(Offline) [2016] -with Team

<u>C#</u> windows a pplication that can capable of a djusting any changes in the government structure, managing resources wisely, providing distinguished services to citizens and continuously interacting with them.

#### - Calculate Critical Path [2017] -individual

<u>C#</u> widows application that calculate the critical path to your project and time plan, you can insert task or delete task or update task time and program will work with changes and will recalculate the critical path

#### - Image Encryption and Compression [2017] -with Team

<u>C#</u> windows application that can encrypt and decrypt images using Linear Feedback Shift Register algorithm then compress using Huffman algorithm

#### - FOS [2017] -with Team

C Console application that make simple Operating system that allow kernel and user to make dynamic allocation and free this space using next fit and best fit strategy, load and run multiple user program, pagefault-handler using LRU algorithm, CPU scheduling using multi-level-feedback-queue

#### Product Management System [2017] -individual

<u>C# and ADO.net crystal report (Arabic language)</u> windows application that allow user to sell products add suppliers, add users ,etc

#### Download Manager [2018] -individual

<u>Python and PyQT</u> application that can download videos and playlists from youtube using pafy library

#### 3D Packman Game [2018] -with Team

<u>C++</u> 3D packman game with opengl library contain two levels and option for two player

#### - Correct Keyboard mistyping [2018] -individual

<u>Chrome Extension using html/css/js</u> that correct the keyboard mistyping from English to Arabic and vice versa like when you write [صثنوخة this tool convert

## - Photo Factory [2018] -individual

<u>C#</u>windows application that make some functions related to images like (take screenshots, resize images, crop image, collect images into pdf file)

#### - Egyptian Banknote Counter [2019] -with team

<u>Matab</u> project that can count value of Banknotes from image using some image processing techniques like segmentation

# Violence Recognition from Surveillance Videos [expected jun-2019] -with Team

<u>Python</u> graduation project aim to developing a technique for the automatic analysis of surveillance videos in order to identify the presence of violence, up till now we use VGG pretrained network to extract spatial features following by LSTM to extract Temporal features then Dense Layers for classification We use Keras

### **Achievements**

Cloud Application Developer 2018 Mastery Award 2nd place in operating systems project

#### **Courses**

Deep Learning Specialization by deeplearning.ai <u>coursera</u> | <u>certificate</u>
Machine Learning by standford <u>coursera</u>
Python for Data Science and machine learning BootCamp <u>udemy</u>