7 El sayed gohr street, Abdeen, Cairo, Egypt

# **MAGDY HASAN**

Github - LinkedIn

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#### **EDUCATION**

- Incomplete M.Sc in computer science, Cairo University, Aug2019-Aug2020
- Bachelor's Degree, Computer Science, Thebes University, GPA: 3.44

#### **EMPLOYMENT**

### **Junior Machine Learning Engineer**

### **Aigorithm**

Aug 2020 - present

 Working on detecting road damage, training different models, such as detecron2 and yolov5, using different datasets such as rdd and our collected data

### **Computer Vision, Intern**

### Aigorithm

Aug 2020 - Oct 2020

 Worked on building a generic framework for parallelizing preprocessing and loading multiple datasets at once using Python. Fine-tuning yolov5 for custom datasets using Pytorch, Training on AWS using COCO and OpenImages datasets, and building scripts for automating AWS usage using Boto3.

## **Software Engineer, Intern**

#### **DevisionX**

Jun 2018 - Aug 2018

 A project to automatically verify ID information, I worked on developing models for segmentation and recognition of Arabic words using TensorFlow, and also did some backend development using python Flask

#### COURSES

- Deep Learning, a 5-course specialization by deeplearning.ai (Certificate).
- Udacity Machine-Learning-Engineer-Nanodegree-Program (Certificate).

### **Projects**

- Ecommerce website (Java Spring, Angular): Main functionality of ecommerce website using Spring as a backend, Angular as frontend and MongoDB for the database
- Questions and answers (JSP, Servlets and MySQL): This a questions and answers system (like ask.fm) with functionality such as ask/answer questions, search users, add friends, etc.
- <u>Human-Action-Recognition</u> (**Keras, Python**): Using ucf101 dataset, trained lstm/cnn models based on extracted features from pre-trained vgg16 and got 92% validation accuracy for 101 action categories.
- Gender-Age predicition (Keras, Python): Given a face image, predict whether the person is male or female, Got a validation accuracy of 0.889 on Adience Benchmark dataset, Used a pretrained InceptionResNetV2 model, working on age predication using IMDB dataset
- Face recognition/keypoints/smile/blink (dlib, Python): Using dlib facial keypoints to build face recognition and smile/blink detection, works in real time with great result
- <u>Stores Future Sales Prediciton</u> (**sklearn, Python**): Dataset from kaggle competition Predict Future Sales competition. Time-series task, task is to predict sales of next month, Did feature engineering, Added mean encoding features and lagged features, Used an ensemble of RandomForest, lightgbm, SGD
- <u>Arabic Image Captioning</u> (**Keras, Python**): Used Flickr8k\_Dataset and used Bing translator for translating, Used Arabic word2vec (<u>AraVec 2.0</u>), result is not good because the bad translation
- Education-management-system (c++): student register courses, adding/manage students/courses/assignment.

### **COMPETITIVE PROGRAMMING**

- ICPC: ECPC 2019 37th, <u>ECPC 2018</u> 64th, <u>ThebesAndElShoroukCPC 2018</u> 1st, <u>ECPC 2017</u> 86th, <u>ACPC 2017</u> – 66th, <u>ECPC 2015</u> – 3 problems Solved, <u>ACM ECPCQ 2017</u> – 2nd
- Facebook Hacker Cup 2019: Round 2: 775th, Round 1: 1499th
- <u>Codeforces</u> Rating 1709, 865 Problem Solved, <u>Topcoder</u> Rating 1535, 430 Problem SolvedJudge at 4 ACM Egypt locals 2019

#### **Skills**

• C++, Java, Spring, JSP & Servlets, , MySQL, NoSQL, Python, Linux, JavaScript, HTML, CSS, Pytroch, TensorFlow, Keras, Algorithms, Data structure, Visual studio, Eclipse, Github

### Interested In

• Web development, Distributed Systems, Operating systems, large scale projects, Programming competition, Artificial Intelligence, Machine Learning, Deep learning.