

Yumna Hamdy

Software Engineer

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Education

BACHELOR OF HEALTH CARE ENGINEERING, *Cairo University*

2018 – 2023

GPA:3.15

Giza, Egypt

Skills

Machine Learning (scikit-learn)

Programming Languages (C++, C, Java, MATLAB, Python)

Deep Learning (TensorFlow, Pytorch)

Database (SQL/NoSQL)

Pandas, NumPy

Web Development (Flask, Angular, HTML, CSS, JavaScript, Django, Spring boot)

PyQT

Problem solving

Source control tools

Professional Experience

Integration Engineer, *Vodafone*

11/2023 – present

- Designing and implementing seamless connectivity solutions between the company's innovative products and external systems.

Cairo, Egypt

Backend Engineering Intern, *Bank Misr*

08/2022 – 09/2022

- Learnt Java/Spring boot through the internship.
- Collaborated with a team of developers to work on a project using Spring Boot and a MySQL database
- The project I worked on got the first position in the projects competition.

Cairo, Egypt

Intern, *Gameball*

07/2022 – 08/2022

- Examined successful case studies, participated in workshops and seminars, and conducted extensive research to learn about the technical and non-technical needs for creating a firm.

Cairo, Egypt

Intern, *57357 Hospital*

08/2021 – 10/2021

- Gained practical experience in biomedical techniques under the guidance of experienced researchers.
- Attended seminars and workshops, actively participating in discussions to broaden knowledge and understanding of biomedical research processes.

Cairo, Egypt

Publications

AI-Based Communication Tool for High-Functioning Autistic Children, *IEEE Xplore*

Will be presented at IEEE EMBS in Malta on 7-9 December. A paper about my Graduation Project that was a tool for autistic children to help them through communication with people.(Accepted)

Organizations

Shell Eco-racing team in Cairo University, *Head of the web-dev team*

2021 – 2023

Giza, Egypt

- Worked on an application for the team to organize the workshop of the team.
- Was able to lead two sub-teams (frontend and backend) during the construction of the web-site.

Projects

Graduation Project

AI-based tool for high functional autistic children

A tool can be used by autistic individuals to ease their social communication, through which deep learning and game development are used.

(Gained 21st position out of 183 teams in Dell envision the future competition for graduation projects)

Tech stack: Tensor flow, Python, Flask, PostgreSQL, Unity

Detecting Melanoma Cancer

Used DL to predict if the patient is having Melanoma by using a dataset from Kaggle, that is composed of images and tabular data. (Link [↗](#))

Tech stack: Tensor flow, Python.

Predicting the stay length of a COVID patient in hospital

Used classical ML to predict the length of stay of a COVID-19

patient and we were able to get 92% accuracy by using KNN algorithm. (Link [↗](#))

Tech stack: Sci-kit learning, Python

Movie-rating application

Developed through my summer backend internship in Banque Misr

in a movie rating app. (Link [↗](#))

Tech stack: Spring boot framework, Java, MySQL

3D-Medical imaging viewer

Viewed the sagittal, coronal, axial and oblique planes of dicom images. (Link [↗](#))

Tech stack: pyQT, Python.

Image processing basics from scratch

Made a GUI to present images and practice on

them image processing rules and filters. (Link [↗](#))

Tech stack: MATLAB.

Flickr-like application

Developed in the backend of a Flickr-like application. (Link [↗](#))

Tech stack: Django framework, MongoDB NoSQL database

Shazam-like application

Built an application gets similar songs to the song chosen by the

user using Hamming distance to get the similarity indices. (Link [↗](#))

Tech stack: Python, pyQT

Restaurant simulation

Developed a restaurant simulation in which we simulate a regular restaurant activity using data structures and algorithms. (Link [↗](#))

Tech stack: C++