Haitham Ismail

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EDUCATION

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING   OCTOBER, 2018-JUNE, 2022

Al Maaref University   GPA: 3.96/4.0

- Graduated with high distinction
- Listed on dean's honor list for the whole duration of my study

SKILLS

- **Software:** Python, TensorFlow, C++, MATLAB, Packet Tracer, Huawei eNSP, C#, PSpice, Java
- **Certificates:** Huawei Certified ICT Associate in Cloud Computing, Deep Learning Specialization by DeepLearning.ai

EXPERIENCE

INTERNSHIP AT ACT HOLDING LEBANON   JULY, 2021-SEPTEMBER, 2021

ACT Holding

- Finished a course about security fundamentals, and a course about the Elastic Stack and REST API in preparation for the implementation phase
- Built using the Elastic Stack, a security information and event management solution that ingests logs from a Fortinet firewall, Cisco routers and switches, and an active directory for analysis depending on a set of rules
- Provided a weekly report and presented in front of staff members the week's outcome and discussed the next stage

EMBEDDED SOFTWARE ENGINEER   JUNE, 2022-PRESENT

Eigentec

- Ported projects to Real-Time operating system by dividing the functionalities into tasks and interrupts and studying their priority
- Developed, in Python, applications that are used by the user to control the embedded software with data logging capabilities
- Designed and edited embedded software in C language to meet the design requirements
- Documented the project to be user-friendly to the targeted customers

PROJECTS

NEURAL NETWORKS FRAMEWORK   FALL, 2019

- Developed, in Python, a neural networks framework that uses Numpy package to vectorize the calculations
- Structured the project in an object oriented design similar to TensorFlow with separate classes for activations, layers, losses, optimizers, models.
- Fully documented the project with examples and the mathematical equations.

CLASSIFIER FOR DIABETES PATIENTS   SPRING, 2022

Al Maaref University

- Explored the dataset from the National Institute of Diabetes and Digestive and Kidney Diseases, through checking the data types of each attribute, the percentage of missing values, type of noise and type of distribution.
- Handled missing values by trying different methods and choosing the optimal one and removed the outliers
- Tested ID3 and CART algorithms to build a decision tree classifier which result in low accuracy
- Tested the KNN on different sample rates and different value of K to get the optimal hyperparameters. The final model had precision of 100%, recall of 0.88% and F1-score of 0.92%

IOT BASED SMART HOME ENERGY MANAGEMENT SYSTEM SPRING, 2022

Al Maaref University

- Wrote a literature review of some of the available solutions
- Designed a smart home energy management system based on the four layers IoT architecture that aims to save money by scheduling tasks on efficient sources
- Designed a source scheduling algorithm that schedule tasks on different sources based on the priority and uptime of the sources
- Built a simulator using Python and Simpy library to check the feasibility of the project. The results yielded at 20% saving on different scenarios.

EXTRACURRICULAR ACTIVITIES

HUAWEI ICT COMPETITION OCTOBER,2020-DECEMBER, 2020

- Completed 7 courses in different fields (WLAN, Security, Routing & Switching, 5G, Cloud Computing, AI, Storage) which we were examined in through preliminary and national stages.
- Trained on different software to solve the lab exams (Huawei eNSP and FusionStorage)
- Placed 2nd in the national stage

HUAWEI SEEDS FOR THE FUTURE DECEMBER, 2020

- Completed a 1 week program of live sessions with experts in different technical fields
- Completed 3 beginner courses and 3 advanced courses in AI, 5G, and Cloud Computing
- Attended sessions about the history and the vision of Huawei, Chinese traditions and cultural acts