ZAHRAA SWEIDAN

Computer Science Graduate, LAU, 3.86 GPA

@ zahraa.sweidan@lau.edu   in linkedin.com/in/zahraa-sweidan-10783611b/

EXPERIENCE

Researcher

Lebanese American University

📅 August 2018- May 2020   📍 Beirut Campus, LEBANON

- Security Engineering (Distributed hashing, Trust Evaluation, Cryptographic algorithms)
- Resource optimization for enabling URLLC in Smart Factories
- Self-Organized UAVs using Reinforcement Learning
- Deep Learning and Text Analysis

Part-time Instructor and Faculty Member

Lebanese American University

📅 Sept 2018 - May 2020   📍 Beirut Campus, LEBANON

- Main Teaching Assistant - CSC243 Introduction to Object Oriented Programming
- Main Teaching Assistant - CSC245 Objects and Data Abstraction
- Teaching Assistant - CSC310 Algorithms and Data Structures

Internship - Full Stack Developer

VIBRANTlab

📅 July 2017   📍 Dekweneh, LEBANON

- Worked on front-end and back-end development for various websites
- Learned HTML5, CSS3, Bootstrap, Owl Carousel, PHP, MYSQL, WordPress

Self-Learner

- Machine Learning Algorithms (Summer 2019 - Current)
- Optimization Modeling (Summer 2018)

VOLUNTEER EXPERIENCE

Volunteer Instructor for ALLGIRLSCODE, AUB, Aug 2017
Gave coding workshop for teenaged girls where I taught the basics of building a website (CSS3 and HTML5) using a curriculum set by the organization to 20 students for two consecutive days

2019 Lebanese Collegiate Programming Contest, LAU, Apr 2019
Participated in the preparation of the judging system of Lebanese Collegiate Programming Contest at LAU

TECHNICAL SKILLS

- General Programming: Python, Java, C++, C, matlab
- Data Analysis: Pandas, NumPy, R
- Familiar with Google Cloud Big Query and Data Studio
- Database: SQL, SQLite, Google Firebase
- Web: HTML5, CSS3, Bootstrap, OwlCarousel, PHP, MYSQL, WordPress

FAVORITE COURSES AND PROJECTS

Capstone Project
Developed an Android and Firebase mobile application to allow users buy items from other users

Software Engineering
Developed a student fingerprint voting system using Java and Eclipse

Data Mining
Created several models using R-studio from a dataset to detect what are the most important factors that lead to a liver disease

Facial Expression Recognition
Implemented several machine learning models, namely: Logistic Regression, Convolutional Neural Networks, and Support Vector Machines for classifying faces among 6 emotion categories using Python

Feature Selection for Sentiment Analysis of Tweets
Proposed a metaheuristic approach to select the optimal subset of features within a dataset and study its impact on a machine learning model

PUBLICATIONS

Dynamic Multipath Resource Management for Ultra Reliable Low Latency Services

2019 IEEE Symposium on Computers and Communications (ISCC)

📅 June 2019

Formulate the problem of simultaneous utilization of multiple paths via different wireless interfaces in order to deliver data from source to destination in a timely manner and with high reliability as a mixed integer program

EDUCATION

M.S. in Computer Science

Lebanese American University 3.86 GPA

📅 Sept 2018 – Current

B.S. in Computer Science

Lebanese American University 3.67 GPA

📅 Sept 2015 – May 2018