

Sara Hajj Ibrahim

Haret Hreik , Beirut , Lebanon | +961 81378518 | sarahhajibrahim1@gmail.com

LinkedIn: <https://www.linkedin.com/in/sara-hajj-ibrahim/>

Objective

Seek a challenging career in Machine Learning/Data science or continue my PhD studies.

Education

❖ Baccalaureate 2003 - 2016

Al Iman School

- Primary , Secondary (Life Sciences)

❖ Bachelors Degree in Computer Science 2016 – 2019

Beirut Arab University (BAU)

- Cumulative GPA = 3.78/4
- Ranked in Honor list (first rank in class CGPA)
- Courses Taken:
Object oriented programming, Digital circuits, Web programming, Discrete structures 1 & 2, Data structures, Computer organization and architecture, Database systems, Theory of computation, Artificial intelligence, Android development, Software Engineering, Introduction to networking, Introduction to algorithms, Programming Languages, Calculus 1 & 2, Probability and Statistics, Linear Algebra, Numerical Methods, Differential Equations, Topics in Linear Algebra, Operating Systems, Image Processing

❖ Masters Degree (Thesis-based) in Computer Science 2019 - 2021

American University of Beirut (AUB)

- Cumulative GPA = 3.81/4
- Thesis defense completed in June 2021
- Courses Taken:
Information Retrieval, Advanced Computer Graphics, Machine Learning, Optimization and non-linear probability, Data Science, Graph Theory, Computer Information and Security

Work experience

❖ Summer Internship (20/06/2017 - 01/09/2017)

Optimal solutions – Lebanon, Ain El Remmaneh

- Learned PHP coding, Magento platform and WordPress. + Helped in research/development of nurseries world online project.

❖ Internship (15/06/2018 – 15/04/2019)

Integrated Digital Systems – Lebanon, Bir Hasan

- We were guided in our senior project, consisting of a web app & android app.

❖ Seeds of future training program (07/11/2018 – 28/11/2018)

Huawei technologies – China, Shenzhen

- A 2 week program provided by Huawei Technologies company in China.

❖ Internship (01/07/2019 – 15/09/2019)

BankerWay – Lebanon, Hazmieh

- Worked on Temenos T24 core banking developments that involve financial transactions in jbase and java.

❖ Administrative Assistant & Data analysis (15/08/2019 – 30/08/2021)

American Univeristy of Beirut – Lebanon, Hamra

- Assisted staff in student services office Arts and Sciences department: worked on transfers, deans honorlists, petition system, advising tasks, registrations, etc., and automated frequently repeated tasks using java/vba. Also worked with cleaning, filtering and analysing data, practiced profession in Microsoft excel and access database applications.

❖ Research Assistant (20/06/2020 – 15/08/2021)

American Univeristy of Beirut – Lebanon, Hamra

- Worked on “Security of novelty detection in deep learning” research and used as my thesis topic. In my thesis, I consider the case study of abstraction-based novelty detection to show that it is not robust against attacks (Adversarial machine learning attacks + Optimisation based attacks) along with providing suitable defense mechanism (Denoising Auto-encoders). The

Personal Information

- Birth Date:
15/06/1999 – 22 yrs
- Nationality:
Lebanese
- Interests:
Drawing and reading
- Languages:
Arabic and English

Personal Skills

- Ability to learn things easily
- Motivated/hardworking
- Ability to work in teams
- Ability to work under pressure

Research Topics

Graceful Labelling Conjecture, Effective Searching of RDF Knowledge Graphs, Stock Portfolio Optimization, Classifying Phishing URLs Using Recurrent Neural Network, Simulating Malicious AI, Meta-Learning Algorithms, Machine Learning Speech Recognition, Survey of network anomaly detection techniques, Two-tier network anomaly detection model: a machine learning approach, Local Novelty Detection in Multi-class Recognition Problems, Kernel Null Space Methods for Novelty Detection, Generative Probabilistic Novelty Detection with Adversarial Autoencoders, Outside the Box: Abstraction-Based Monitoring of Neural Networks

Technical skills and knowledge

- Python including libraries/apis: (TensorFlow, Keras, PyTorch, Flask, etc.)
- Visual Basic in Microsoft Applications
- Java including Android development (Firebase & MySQL)
- PHP
- R
- C++
- Web development (JavaScript – basic level, JQuery, Ajax, Html & CSS- responsive design, Bootstrap)
- Ios Development – basic level
- Laravel/Code ignitor frameworks – basic level
- Haskell, Assembly and Prolog, MATLAB – basic level

Applications knowledge

Microsoft office (Excel, Word, Access, ..), Dreamweaver, Microsoft visual studio, Eclipse, NetBeans, Android Studio, Magento e-commerce platform, Xcode, Wireshark, Host + domains online web servers (DNS), WordPress, MySQL server, Firebase server, Microsoft SQL server, SQLite server, Ubuntu OS, Linux OS

Projects Done

- Library project (Java OOP with GUI)
- Resort SHARM L SHEIKH website (Html, CSS, PHP, Ajax, JQuery)
- Mall Project (Data Structures)
- Pools Summer app (Android Development using Java - firebase)
- Animal care app (Software Engineering /only documentation)
- Hotel website (Html, Bootstrap, PHP, Ajax, JQuery)
- Java game Searching for Thief (Artificial Intelligence)
- Game resembling color switch (Ios Swift development)
- Snake Ladder (Java with graphical animations and GUI)
- Vent Project – web app (Html, Bootstrap, PHP, Ajax, JQuery)
- Vent Project – android app (Android Development using Java - MySQL)
- Medical website using flask with Information retrieval techniques (ChatBot that detects a disease due to your symptoms + medical search according to relevant results from google)
- Android Malware detection system using Machine Learning/Data science techniques
- Depression detection Project using Machine Learning/Data science techniques

Achievements

- Participated in LCPC competition
- Participated in ICT Huawei competition
- Participated in Young innovation awards Netherlands embassy competition, vent Project.(One of the 5 top finalists).
- Participated in 2nd Workshop on Artificial Intelligence for Anomalies and Novelities (AI4AN 2021)

Certificates

- Internet and Computing Core Certification (IC3)
- Smart City Workshop Certification
- ICT Huawei Certification from China
- Culture Certification from China
- Technology Workshop Certification