

Soumia Zohra El Mestari

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[LinkedIn](#) | [Github](#) | [Personal Portfolio](#)

EDUCATION:

Ecole supérieure d'informatique(ESI): Engineering & Msc in computer science 2015 - 2020

Department of informatics Systems, class rank: 1st.

Courses : advanced algorithms, embedded systems, advanced databases, oriented object programming, math classes(algebra, mathematical logic, calculus, probabilities and statistics), web technologies, computer architecture, compilation theory, informations systems design, advanced networks, security of systems and networks, simulation techniques, middlewares, advanced AI, introduction to robotics, data mining, big data, multimedia & imagery.

EXPERIENCE:

CMMRS(Cornell, Max Planck and MaryLand) Pre doctoral Research student, Germany: 07/2020 - 10/2020

Pre-doctoral student in cutting-edge research in computer science, including databases and data analysis, distributed systems, security and privacy, Internet measurement and network architecture, large-scale machine learning, and theory of deep learning(Was held online because of the Covid19 pandemic).

L2TI Lab Sorbonne Paris Nord, France:

01/2020 - 07/2020

Master research intern.

- work on a thesis titled "Motion estimation using machine learning for video compression".

FAMAG SARM, Industrial Zone Sidi Bel Abbes, Algeria :

Summer 2018

Summer intern, Informations & technology department of the company.

- Collaborated with the team to make a plan to transfer data from the old database to the new ERP database(SAP HANA) and define the main analytical axes.

The Algerian Telecom, Sidi Bel Abbes, Algeria :

Summer 2016

Summer intern, Technical department of the company.

- Resolved some of the scheduling problems of the troubleshooting teams and this sped up the process twice.
- Collaborated with the technical teams to set the network installation for a new department.

PROJECTS:

- **Deep Coder:** (Project in Collaboration with the university of Sorbonne Paris Nord) 01/2020 - 09/2020
Design a Deep learning based system to capture temporal redundancy for video compression.
- **Malware Revealer:** 03/2019 - 09/2019
Designing a malware features extractor for building on demand datasets and building machine learning classifiers to spot malwares, the product is designed with the respect of a microservices architecture.
- **Doc's Admin :** 03/2018 - 05/2018
Designed & implemented within a team a platform to manage medical offices tasks across the country.
- **GraphIt :** 10/2017 - 12/2017
Designed and implemented a simulator for the graph theory algorithms.
- **SightOn :** 03/2016 - 05/2016
Designed and implemented within a team a motion detection solution for actuating an electronic circuit.

CERTIFICATIONS:

Udacity: Intel Edge Ai For IOT developers challenge

01/2020 - 02/2020

Current participant and technical moderator in the intel Edge AI challenge.

Covered Modules: general deep learning techniques, Open VINO toolkit.

Udacity: Certified Computer Vision Engineer **09/2019 - 12/2019**
Fully sponsored by Facebook after being among the top 1% students during their secure AI challenge.
Covered Modules & projects : CNNs, RNNs, LSTMs and attention models ,image segmentation techniques, localization and motion, object tracking , Kalman filters.

Udacity: Certified Deep Reinforcement Learning Engineer **08/2019 - 11/2019**
Fully sponsored by Facebook after being among the top 1% students during their deep learning challenge.
Covered modules & projects : deep Q-networks (DQN), deep deterministic policy gradients (DDPG), application of these concepts to train agents to walk, drive, or perform other complex tasks and it covers :

- Fundamentals .
- Value-Based methods.
- Policy-Based methods.
- Multi-Agent reinforcement learning.

Udacity: Certified Deep Learning Engineer **01/2019 - 05/2019**
Fully sponsored by Facebook after being among the top 2% students during their Pytorch challenge.
Covered modules & projects : convolutional neural networks(CNN), recurrent neural networks(RNN), generative adversarial networks(GAN), attention & auto-encoders, deployment.

Udacity: Certified Data Analyst **09/2018 - 03/2019**
Fully sponsored by Bertelsmann after being among the top 3% students during their data analysis challenge.
Covered modules & projects : data investigation, practical statistics & A/B tests, testing a perceptual phenomenon, exploratory data analysis, data wrangling, data storytelling.

Coursera: Stanford machine learning course **Summer 2018**
Online certification.
Covered modules : recommendation systems, clustering, classification techniques, neural networks.

SKILLS:

- Computer Programming: Python, C/C++, R, Java, Java EE, Octave, Assembly, Arduino, SQL, MongoDB, PHP, HTML5, CSS3, JS.
- Frameworks: Pytorch, Pysyft, Scikit-learn, Numpy, TensorFlow, Keras, Hibernate, Matplotlib, Seaborn, Open VINO, Flask, Spring.
- Languages: Arabic(Native), French(Native), English(Fluent, IELTS grade 7.0), Turkish(Intermediate level), Spanish(Beginner).

LEADERSHIP & ACTIVITIES:

AI Hackathon Tunisia : **09/2019**
- Took part in two challenges and ranked 3rd in the flights delay challenge.

Pytorch and Secure AI Facebook Udacity Scholarships : **11/2018 - 07/2019**
- A student leader : Created and maintained a database of resources. + A technical moderator.

Udacity Bertelsmann Scholarship : **05/ 2018 - 05/2019**
- Volunteered within a team to organise technical and motivational live sessions for the community.
- Participated in a Hackathon within a team and ranked second.

AlphaBit Club, High School of computer science **2016 - 2017**
- Organised within a team a Dev Event(DevDay 1.0) where I animated a workshop.