Hadjer Benmeziane

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EDUCATION

Université Polytechnique des Hauts-de-France   Valenciennes, FR
PhD Computer Science, Advisors: Professor Smail Niar, Professor Hamza Ouaghnouni   *Sept. 2020 – Current*

Ecole Nationale Supérieure d'Informatique   Algiers, Algeria
Master of Science in Computer Science; Engineering Diploma in Computer Science   *Sept. 2015 – July. 2020*

Udacity   Remote
Udacity Deep learning with PyTorch Nanodegree Program   *Feb. 2019 – Apr. 2019*

Udacity   Remote
Udacity Deep Reinforcement learning Nanodegree Program   *Aug. 2019 – Dec. 2019*

EXPERIENCE

Transactions on Computer-Aided Design of Integrated Circuits and Systems   Reviewer
HW-NAS articles specifically. PUBLONS Profile   *Mar. 2021*

IEEE Transactions on Systems, Man, and Cybernetics: Systems   Reviewer
HW-NAS articles specifically. PUBLONS Profile   *Feb. 2021*

Massachusetts Institute of Technology, CSAIL Team   Final Year Project - Research Intern
with Baghdadi Riyadh   *Aug. 2019 - July. 2020*
Optimizing PyTorch; a deep learning Framework, with Tiramisu;
a deep learning compiler.
Optimize XLNet with operator fusion and tiling operations.

Palantir   Software Engineer
with Robert Fink   *Sept. 2019*
Contribute in Open Source Projects such as python-language-server

ML Course   Assistant
with Pr. Benatchba Karima   *Avr-May. 2019*
Content Creator of the Machine Learning Course at Ecole Nationale Supérieure
d'Informatique, Algiers.
Create notebooks for the course and exercices.
Present the TDs and help the students understanding the code and the tools.

School of AI Algiers   Founder
Make AI knowledge more accessible to everyone   *Mar. 2019*
A community of Algerian passionate that shares AI knowledge and creates projects.
Organize several workshops and sessions to explain several deep learning concepts.

CERIST   Data Science Intern
with Abdelouahab AMIRA, Security Division   *June. 2018 - July. 2018*
Malware Classification application using Deep Learning

PUBLICATIONS

Hardware-aware Neural Architecture Search: Survey and Taxonomy   Apr 2021
IJCAI 2021 - https://www.ijcai.org/proceedings/2021/592
Accelerating Neural Architecture Search with Rank-Preserving Surrogate Models   Jul 2021
Best Student Paper Award - ArabWic 2021
A Comprehensive Survey on Hardware-aware Neural Architecture Search   Dec 2020
https://arxiv.org/abs/2101.09336

Projects

Pytorch_Tiramisu: An open-source python package that optimizes PyTorch models by calling the appropriate deep learning operators in Tiramisu Compiler.

AI2E: AI Everywhere Everytime is a series of workshops in machine learning. I helped selecting the topics, creating the notebook template and reviewing the content. https://github.com/SchoolofAI-Algiers/AI2E-workshops

DL_Trending: Data Visualizations of the trending tasks and frameworks for Deep learning by analysing Model Zoo implementations and Github contributions.

Malware Classifier: Malware Classifier is a Rest API made with Django that classifies apk files between legitimate and malware.

Tayssir Hajj: A social network built for pilgrims to better **recommend** an accompanist for elder people.

Epsilon: A lightweight Linux Distribution. Project made as part of a university homework.

Selected Awards

WISC Scholarship Award   2021
Women in Service Computing Scholarship award.

WTM Scholarship   2020
Selected among 20 tech women in Europe and Africa to be awarded the Anita Borg's Scholarship.

Udacity Pytorch Side Project Winner On the category of Cyber Security   2019
with a Malware Classification Model created with CNNs

Individual Tunisia AI Hackathon NLU Challenge   2019
4th Best Model analysing a dataset of mixed languages French, Arabic and Arabic in Latin letters.

Programming Skills

Languages: Python, Javascript, C/C++   **ML/DL Frameworks**: Tensorflow, PyTorch, Scikit-Learn
Web/Mobile Frameworks: Laravel, Flutter   **Technologies**: GCP, AWS, CUDA, MPI, Unity

Communications & Talks

SOAI Reading Sessions (Each Friday)   2020/2021
with School of AI Algiers

AI2E: AI Everyday Everywhere   Apr. 2020 – June. 2020
with School of AI Algiers

Workshop : Machine Learning Study Jams   Oct. 2019
with GDG Algiers

Talk : ML Pipelines with Tensorflow Extended   Oct. 2019
At Devfest Algiers 2019

Workshop : Computer Vision & Deep Learning   Sept. 2019
with School of AI Algiers

Talk : How to Start your AI Journey   Mar. 2019
At International Women's Day Organized by WTM Algiers

Workshop : Deep Learning with PyTorch   May. 2019
with Facebook Circle Algiers

Workshop : Neural Neworks with Scikit-learn   Dec. 2018
At GDG Algiers School Event

Workshop : Neural Networks   Nov. 2018
with School of AI Algiers

Workshop : Linear Regression and Naive Bayes Oct. 2018
with School of AI Algiers

Talk : Build a Machine Learning Intuition Sept. 2018
At Start Your AI Journey Event

Workshop : Linear Regression and Naive Bayes Oct. 2018
with School of AI Algiers

Volunteering Activities

Google Developers Group Algiers Organizer
Former Manager Development Department *Since Sept. 2018*
Active member since September 2018.
Helping in organization and the manager of the development team.

* ∗ Developing Devfest Algiers 2018 Website : devfest-algiers-2018.devfest.com
* ∗ Member of the development team of the GDG Algiers Website : gdgalgiers.com
* ∗ Machine learning Mentor at the hackathon Devfest 2018
* ∗ Event Manager of GDG School 14-15/12/2018

Women Techmakers Algiers Organizer
WTM Scholar & WTM Ambassador *Since Sept. 2018*
As a WTM Ambassador, I help in my community guide more girls to discover
the awesome projects they can build by working in the tech field.

School of AI Algiers Founder
Former Manager *Since Sept. 2019*
Dean of a large community of AI passionate developers and curious people
that teaches and learns more about AI.

* ∗ Organized multiple events.
* ∗ Increase the number of chapter of School of AI in Algeria
* ∗ Create a Youtube Channel to overcome the pandemic and continue learning while at home.