HASSAN ISMAIL FAWAZ

Data Scientist & Machine Learning Researcher

@ hassanismailfawaz@gmail.com

Paris, France

https://github.com/hfawaz

https://hfawaz.github.io

EDUCATION

Université Haute-Alsace

PhD in Machine Learning

Sep 2017 - Present

Mulhouse, France

Université de Bourgogne

Masters in Databases & Artificial Intelligence

Oijon, France

Université Antonine

Masters in Software Engineering

₩ Sep 2012 - Sep 2017

P Beirut, Lebanon

SKILLS

Python, Java, C++, DBMS, Unix Tensorflow, Keras, Scikit-learn Machine Learning, Data Science Writing, presenting, communication



EXPERIENCES

Deep Learning Lecturer

Université Haute-Alsace

Sep 2018 - Present

♥ Mulhouse, France

Giving an advanced course on deep neural networks.

Visiting Machine Learning Researcher Monash University

Mov 2019 - Dec 2019

Melbourne, Australia

Classifying satellite image time series.

Machine Learning & Semantic Web Intern Orange Labs

Mar 2017 - Sep 2017

♀ Sophia Antipolis, France

Designing a dataset recommendation engine.

Data Privacy & Optimization

Université Antonine

🛗 Jun 2016 – Aug 2016

Peirut, Lebanon

Developing data anonymization technique with CPLEX.

Freelance Web Development

MradMCC

mar 2016 - Aug 2016

Page Beirut, Lebanon

Creating a WordPress website that can be found here.

PARTICIPATION

- International Workshop on Machine Learning & Artificial Intelligence
- PRAIRIE Artificial Intelligence Summer School
- Learning from Data Streams and Time Series
- International Conference on Computer Assisted Radiology & Surgery
- International Deep Learning Summer School
- Lebanese Collegiate Programming Contest

AWARDS

- IEEE Big Data Student Travel Award
- Université Antonine Programming Contest

PROJECTS

Keras.io

 In this project I provided the first Keras tutorial on deep learning for time series classification.

InceptionTime

 In this project, we propose an Inception based network that applies several convolutions with various filters lengths for Time Series Classification (TSC). In contrast to networks designed for images, we are able to explore filters 10 times longer than recent Inception variants for image recognition tasks.

Deep learning for time series classification

• In this project, we study the current stateof-the-art performance of deep learning algorithms for TSC by presenting an empirical study of the most recent DNN architectures for TSC. We also provide an open source deep learning framework to the TSC community where we implemented each of the compared approaches and evaluated them on a public TSC benchmark (the UCR archive).

Interpretable surgical skills evaluation

 In this project, we designed a Convolutional Neural Network (CNN) to evaluate surgeon skills by extracting patterns in the surgeon motions performed in robotic surgery. Following the latter project, we provide an open source implementation of synchronizing multiple surgical training videos that would allow the surgeon to improve their training.

Transfer learning for time series data

• In this project, we performed an experimental study on how to choose the best source dataset for a given target dataset when classifying time series data.

Deep learning extension for sktime

• In this project, we provide an extension package for deep learning with Keras for sktime, a scikit-learn compatible Python toolbox for learning with time series and panel data.