HASSAN ISMAIL FAWAZ

Senior Machine Learning Engineer | PhD in Artificial Intelligence

@ hassanismailfawaz@gmail.com ♦ Paris, FR ⌂ **hfawaz** 🎓 **publications**

EXPERIENCES

Data Scientist Intern
Orange Labs

📅 March 2017 – September 2017 ♦ Nice, France

Java recommendation system based on **RDF triplet data** in addition to **NLP** methods using **TF-IDF** and **Word2Vec**

Machine Learning Engineer
Besedo

📅 Oct 2020 – April 2022 ♦ Paris, France

- Content moderation using Machine Learning
  - Benchmark latest **Computer Vision Deep Learning** models
  - **Guide & mentor** junior data scientists and linguistics
  - Evaluate **NLP transformer** models for **text classification**
  - Benchmark various **NLP** models: **BERT**, **RoBERTA** …
  - Develop **microservices** for live inference on **AWS**
  - **Reduce latency** using quantization, pruning, JIT & tensorRT
  - **Monitor** model **performance** and decay (e.g. accuracy)
  - Evaluate concept & data **drift**, covariate & label **shift**
  - **Orchestrate** and automate model training & evaluation
  - Contribute to **HuggingFace**'s open source datasets (link)
  - Deliver **proof-of-concepts** for ML models using **Streamlit**

Senior Machine Learning Engineer
Ericsson

📅 May 2022 – Present ♦ Paris, France

- **Tech Lead** for in-house research project on **transfer learning**
  - Setup **best practices** for **Deep Learning** experimentation
  - Code review & **mentoring** of PhD students & data scientists
  - Implement state of the art models with **PyTorch & SKLearn**
  - **Scale up Deep Learning experiments** on **Kubernetes**
  - Define the research project **roadmap** & team responsibilities
  - Lead a monthly **reading group** on Artificial Intelligence
- **Machine Learning Engineer**: developing a microservice
  - Code review, unit & integration tests, **CI/CD**
  - Dealing with **Kafka** based communication system
  - Develop **ML Ops** & model **Life Cycle Management** (LCM)
- **Data Engineer**: develop big data processing pipelines
  - **Spark** for extracting & normalizing **parquet** data
  - **Clustering** & **Forecasting** of **time series**

DATA SCIENCE SKILLS

Computer Vision, NLP & Time Series	●●●●●
Pytorch, Scikit-learn, Pandas & HuggingFace	●●●●○
Hydra, Tensorboard & Data Version Control	●●●●○
Linear Algebra, Geometry & Probability	●●●●○
Writing, Presenting & Knowledge Sharing	●●●●○

EDUCATION

Université Haute-Alsace
PhD in Machine Learning

📅 Sep 2017 – Sep 2020 ♦ Mulhouse, France

- Advancing **Deep Learning** for **Time Series Classification** (TSC) (link)
- Contribute to **Keras.io** with a tutorial on Convolutional Neural Networks for TSC (link)
- Open sourcing the *dl-4-tsc* framework with **1k+** GitHub ⌂ stars (link)
- Publishing in top conferences and journals while reaching **#1 of all time** in DMKD (link)
- Student travel **award** for IEEE **Big Data** 2018 conference at Seattle (link)
- **International** collaborations: Monash University (**AUS**), Alan Turing Institute (**UK**), The Open University (**NL**)
- Teaching a **Deep Learning** course for masters students at ENSISA engineering school

Université de Bourgogne
Masters in Databases

📅 Sep 2016 – Sep 2017 ♦ Dijon, France

- SQL, NoSQL, Graph
- Data Mining, Semantic Web
- Linear & Constraints Programming

Université Antonine
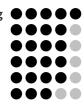**Masters in Software Engineering**

📅 Sep 2011 – Sep 2016 ♦ Dijon, France

- JAVA, C#, Multi-threading, Web Services
- Networking, CCNA Routers & Switches

DEVELOPMENT SKILLS

Object Oriented Programming	●●●●●
Software Design Patterns	●●●●○
Algorithms & Data Structures	●●●●○
Python, SQL, NoSQL	●●●●○
Time & Memory Complexity	●●●●○
MapReduce, Java, C++	●●●○○

OPERATION SKILLS

Git, Code Review, Unit Tests	●●●●○
Docker, Kubernetes	●●●●○
GitLab CI/CD Pipeline	●●●○○
High Perf. Computing (HPC)	●●●○○
Amazon Web Services (AWS)	●●○○○
REST, gRPC, Message Brokers	●●○○○