HASSAN ISMAIL FAWAZ

Senior Machine Learning Engineer | PhD in Artificial Intelligence

@ hassanismailfawaz@gmail.com   📍 Paris, FR   hfawaz   🎓 publications

EXPERIENCES

Senior Machine Learning Engineer
Ericsson

📅 May 2022 – Present   📍 Paris, France

- **Tech Lead** for in-house research project on **transfer learning**
  - Setup **best practices** for machine learning experimentation
  - Code review & **mentoring** of PhD students & data scientists
  - Implement state of the art models for domain adaptation
  - **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
  - Follow **software engineering** best practices
  - Code review, unit & integration tests, CI/CD
  - Dealing with **Kafka** based communication system
  - Working and **collaborating** with other **microservices**
  - Implement and investigate various **design patterns**
- **Data Engineer**: develop big data processing pipelines
  - **Spark** for extracting & normalizing **parquet** data
  - **Clustering** & **Forecasting** of **time series**

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**
  - Develop **microservices** for live computer vision inference
  - **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 using Airflow
  - Contribute to **HuggingFace**'s open source datasets (link)
  - Deliver **proof-of-concepts** for ML models using **Streamlit**

Software Developer Intern
Orange Labs

📅 March 2017 – September 2017   📍 Nice, France

Java recommendation system based on **RDF triplet data**

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

- Advance the state-of-the-art on 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** project 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)
- **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, Constraints Programming
- Data Mining, Machine Learning, Semantic Web
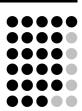
Université Antonine
Masters in Software Engineering

📅 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   ●●●○○