

HASSAN ISMAIL FAWAZ

Senior Machine Learning Engineer | PhD in Artificial Intelligence

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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 **Deep 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
 - Develop **ML Ops** & model **Life Cycle Management** (LCM)
 - 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

- 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 ●●●●●