

Farouk HAKEM

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Personal Profile

AI Engineer with 2+ years of experience in fraud detection and NLP. With a team-oriented attitude, I enjoy to solve complex problems and implement new approaches. I am looking forward to contributing my skills and curiosity in a field I have a keen interest in.

Work Experience

Shift Technology

Paris, France

Data Scientist

Since Sept 2021

- Developed and deployed to production predictive ML models for fraud detection, increasing savings of concerned insurers clients by 20%.
- Significantly boosted the models accuracy by 70%, using more adapted models, better data preprocessing and federated learning techniques.
- Developed a deployment and monitoring system to track the performance of the models and improve them efficiently.
- **Technical Skills:** Python (PyTorch, NumPy, Matplotlib, Pandas, Scikit-learn, LightGBM, XGBoost), C#, SQL, Git, Cloud Solutions (Azure, OVH)
- **Soft Skills:** Teamwork, Leadership, Time Management, Client Facing, Communication, Logical Thinking, Presentation Skills

Bouygues Telecom

Paris, France

Machine Learning Intern

March 2021 - Aug 2021

- Deployed to production a Python NLP engine for classification of intentions and entities used to create chatbots. This has resulted in savings of 1.2 million per year by replacing the NLP services (IBM Watson and SAP), while increasing the accuracy of the service by 15%.
- Developed a recommendation engine that helps telemarketers improve their customer-facing suggestions, increasing subscriptions by 8%.
- **Technical Skills:** Python (Bert Language Model, NumPy, Pandas, spaCy), Java, AWS (EC2, S3...), Gitlab, Docker, Quay, Kubernetes

Education

Institut Polytechnique De Paris

Paris, France

Master in Data Science

Sept 2020 - Aug 2021

- **Courses:** Data Science, Programming for Data Science, Knowledge Representation and Reasoning, Statistical Theory and Methods, Learning Skills through Case Studies, Artificial Intelligence, Machine Learning, Statistical Learning, Unsupervised learning, Reinforcement Learning, Meta-heuristics, Genetic Algorithms

Telecom SudParis

Paris, France

Generalist Engineer

Sep 2017 - Aug 2020

- Graduated with Distinction.
- **Courses:** Mathematics, Probability, Statistical Analysis, Optimization, Stochastic Processes, Time Series, Telecommunications and Networks

Projects

Computer vision for football

Footbar

- Detection of the different phases of the game, shots/passes and player tracking. Cut the time and cost of annotating videos in half.
- **Technical Skills:** Python, OpenCV, YOLO, Openpose, Neural Networks, Fast Fourier Transform

Simulation of training costs of neural networks

Atomic Energy and Alternative Energy Commission (CEA)

- Development of a playful interface to raise awareness of the importance of the economic and ecological impact of the computing infrastructure used to train neural networks on N2D2 (CEA GPU platform). Was presented at CES in Las Vegas in 2021.

Tracking the supply chain of medicines

Chainron

- Development of a decentralized application using blockchain (Ethereum) to monitor the quality of medicines throughout the supply chain.
- **Soft Skills:** Entrepreneurship, Innovative spirit, Communication, Curiosity, Self-Learning

Development of a medical chatbot

Tata Consultancy Services

- Development of a chatbot to help people with neurological diseases. Deployed on several platforms (Facebook, Whatsapp, KakaoTalk.)
- **Technical Skills:** Dialogflow, Node.js, Rasa, Google Cloud Platform, Firebase, Social Network API

Skills

Languages	French (mother tongue), English (C1), Spanish (B2), Arabic
Programming	Python (NumPy, Pandas, Tensorflow, Keras, PyTorch, Scikit-learn. etc.), SQL, Java, C#, OOP, HTML/CSS, JavaScript
Miscellaneous	Linux, Shell (Bash/Zsh), \LaTeX , Tableau, Microsoft Office, Firebase, Git (GitHub/GitLab), Jira, AWS, Azure, GCP, ETL
Soft Skills	Time Management, Teamwork, Problem-solving, Adaptability, Engaging Presentation, Documentation