Otmane El Bourki

● 92130, Paris, France • 📞 +3377573751 • ✉ otmane.elbourki@gmail.com • ⊙ oel • 🔗 oel ⊕ oelbourki.site

SUMMARY

AI Engineer with expertise in developing machine learning solutions, optimizing models, and deploying scalable applications. Skilled in NLP, computer vision, MLOps, and cloud platforms, delivering impactful projects that enhance efficiency and user satisfaction. Currently seeking a **one-year apprenticeship contract** to contribute to innovative projects while further developing my expertise in AI.

EXPERIENCE

AI Engineer
Jun 2023 – Jun 2024

Tetricks · *Paris, France*

- Developed and implemented a machine learning solution for request classification on Google Cloud, achieving a **47% reduction in operational costs** and enhancing request handling efficiency.
- Fine-tuned and quantized large language models (LLMs), resulting in **up to 3X faster inference times** while participating in peer reviews to foster continuous improvement.
- Built an email parser using langchain and LLMs to automate guest request processing, reducing processing time and improving accuracy by **60%**.
- Created a RAG chat application that streamlined guest inquiries, boosting customer satisfaction by **50%** through user feedback integration.
- Utilized vision LLMs for automated categorization of hotel rooms, achieving a **40% increase in operational efficiency** and deploying the solution on Google Cloud Platform (GCP).

ML Engineer intern
Mar 2022 – Jun 2022

Ibn Tofaïl CS Department · *Kenitra, Morocco, Hybrid*

- Designed a facial expression recognition system using the FER2013 dataset, achieving an accuracy of 85%.
- Utilized SOTA computer vision models and evaluated their performance, average precision of 90%.
- Improved model performance by 20% through data augmentation, and regularization techniques etc.
- Incorporated the model into a desktop app, resulting in a 30% increase in user engagement and satisfaction.

EDUCATION

IT Architecture Expert
Nov 2024 – Current

Ecole 42 Paris · *Paris, France*

- Algorithm Design , Problem Solving, Flexibility, Project Management, Teamwork, Optimization.

M.S. in Artificial Intelligence
Nov 2022 – Feb 2024

Ibn Tofaïl University · *Kenitra, Morocco*

- Machine Learning, Deep Learning, Reinforcement Learning, Natural Language Processing, Computer vision.

B.S. in Mathematics and Computer Science
Ibn Tofaïl University · *Kenitra, Morocco*

- Data Structures, Algorithms, Operating Systems, Computer Architecture, Databases, Linear Algebra.

Digital Technology Architect
Mohammed VI Polytechnic University – Ecole 1337 – 42 network · *Benguerir, Morocco*

PROJECTS

End-to-End Kidney Disease Classification System | *Mlflow, DVC, AWS, Mlops*

- Utilized modern software development methodologies and tools including GitHub, MLflow, DVC, Dockerization, and AWS CI/CD for seamless deployment and efficient workflow management.
- Implemented best practices in MLOps to ensure reliable and scalable model deployment.

Article-Advertising Matching System | *LLM, LLAVA, Supabase, Keybert, Vertex AI*

- Implemented a program for matching articles with ads, utilizing KeyBERT to pinpoint relevant keywords.
- Deployed a custom LLAVA on Vertex AI to extract ad-descriptive keywords.

Automated Newsletter Generator with CrewAI and Exa | *AI Agents, Exa, CrewAI, LangChain, Streamlit*

- Developed an automated system using CrewAI to manage a team of AI research agents for fetching and summarizing the latest news.
- Integrated Exa for advanced data aggregation and implemented LangChain and ChatGPT for generating concise and relevant summaries.
- Designed and built a GUI with Streamlit for easy interaction and management of the newsletter automation.

SKILLS

Programming Languages, Other: Python, Java, C, C++, SQL.

Frameworks: TensorFlow, PyTorch, Keras, Scikit-learn, Django, Flask, FastAPI, Streamlit, SQLite, PostgreSQL.

Libraries & Tools: NumPy, Pandas, Matplotlib, Seaborn, NLTK, spaCy, OpenCV, Hugging Face, Langchain, Langsmith, BentoML, LlamaIndex, Autogen, CrewAI, GitHub Actions, Docker, Kubernetes, Kubeflow, MLflow, DVC.

Platforms & Big Data Technologies: AWS (SageMaker), GCP (BigQuery, AI Platform, Vertex AI), Supabase.

MLOps: Model Optimization & Deployment, Continuous Integration/Continuous Deployment (CI/CD), Model Versioning & Experiment Tracking, Infrastructure Orchestration & Monitoring

Machine Learning Engineering: Deep Learning Architectures, Model Fine-tuning & Optimization, REST API Design & Development, Cloud Computing & Microservices.

Certifications: Practical Data Science by AWS, DeepLearning.AI TensorFlow Developer Professional Certificate

Spoken Languages: Arabic (Native), English (Full Professional Proficiency), French (Intermediate Proficiency)