Ahmed Mouncif Lomri

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EDUCATION

University of Michigan – Dearborn, MI
M.S. in Data Science
Military Polytechnic School, Algeria
Software Engineering, MS (Jul 2011 – Jul 2014)

National Preparatory School for Engineering Studies, Algeria Software Engineering, BS (Jul 2008 – Jul 2011)

SKILLS

Programming Languages: Python, JavaScript, Java, C/C++, SQL, R, SQL, PHP

Frameworks/Libraries: Laravel, Vuejs, scikit-learn, Kafka, Pyspark, PyTorch, Tensorflow...

Cloud/Technologies: Firebase, Amazon Web Services (AWS), Heroku, Git, Docker... Strong analytical, problem solving, and algorithm design abilities

Languages: English, French, Arabic

WORK EXPERIENCE

SARL Polybeton, Algiers, Algeria

Head, Technical Information Systems Dept. (Jul 2023 – Dec 2024)

- Designed and implemented software solutions to optimize production and enhance efficiency.
- Collaborated with cross-functional teams to integrate new technologies.
- Conducted system analysis and troubleshooting of manufacturing equipment.

Ministry of National Defense Government of Algeria, Algeria – Algiers

Head, Information Systems Office (Jul 2014 – Jul 2023)

- Designed and developed modules within a large-scale information system government of Algeria
- Performed rigorous testing and debugging of complex software systems.
- Researched and integrated advanced web technologies to improve system scalability.

Project

Full Stack Inventory Management System

(http://paver.byethost12.com)

- Built robust Inventory Management System with Laravel 10, Bootstrap, JQuery and MySQL, designed to streamline inventory tracking, sales, and purchasing processes.
- Integrated real-time updates to ensure that stock levels are always accurate.
- Performed regular inventory audits and supplied reports

Multi-Vendor E-Commerce Marketplace (https://github.com/lomrimoncef/E-commerce-Bird-Shop)

- Developed a Multi-Vendor E-Commerce Marketplace specialized in Avian product using Laravel 10, Bootstrap, JQuery, and MySQL to provide an intuitive online shopping experience for bird enthusiasts.
- Implemented real-time notifications to update customers on order status, stock availability, and promotions.

Real-Time Sentiment Analysis of Twitter Data Using Machine Learning and Apache Kafka (https://github.com/lomrimoncef/Real-Time-Sentiment-Analysis-of-Twitter-Data-Using-Machine-Learning-and-Apache-Kafka)

- Implemented sentiment analysis models using Multinomial Naive Bayes, Logistic Regression, and a rule-based approach with VADER to classify tweets into positive, negative, and neutral categories.
- Developed a real-time sentiment analysis pipeline using Apache Kafka for streaming data ingestion and processing.
- Utilized Python libraries such as NLTK, Scikit-learn, and VADER for text preprocessing, feature extraction, and sentiment scoring.
- Visualized sentiment trends and insights.

Implementation -of -Locality -Sensitive -Hashing -for -Content -Based -Movie -Recommendations -locality -locality

 $\label{eq:using-Apache Spark} Using-Apache Spark \ (https://github.com/lomrimoncef/Implementation-of-Locality-Sensitive-Hashing-for-Content-Based-Movie-Recommendations-Using-PySpark)$

- Implemented Locality-Sensitive Hashing (LSH) with Apache Spark to accelerate similarity search in a content-based movie recommendation system, improving scalability over brute-force methods within large-scale datasets.
- Enhanced movie recommendations with visualizations of posters, genres, and similarity scores using TMDb and OMDB APIs.

ADDITIONAL EXPERIENCE

SARL Polybeton, Algeria

- Developed a real-time monitoring system, boosting production efficiency.
- Implemented a quality control algorithm, reducing defects in concrete products.

Ministry of National Defense, Algeria

- Taught cybersecurity and computer science courses for military personnel.
- Presented "Advancements in Cyber Warfare Tactics" at a National Defense Technology Symposium.
- Presented research related to defense systems and software at annual meetings