YOUNES SADDOUG

+33 06 95 22 01 79 ◇ Paris, France
saddoug.younes@gmail.com ◇ younes-sdg.github.io

OBJECTIVE

Final-year Engineering Student in Applied Mathematics (MEng) & Scientific Computing seeking an end-of-studies internship in machine learning and data science. Strong in optimization, modeling, data analysis, and ML techniques, with practical knowledge in MLOps and cloud platforms (Azure, AWS).

EDUCATION

MEng in Applied Mathematics & Scientific Computing, Sup Galilée, Sorbonne Paris Nord 2022-2025
Relevant Coursework: Numerical Analysis, Machine Learning, Optimization.

Bachelor in Mathematical Modeling and Engineering, Institut Galilée, Sorbonne Paris Nord 2023

Preparatory Classes for Engineering Schools (CPGE) - Physics & Engineering, Ibn Ghazi, Rabat 2020-2022

SKILLS

Programming Languages	C, Python, R, SQL, Matlab, CUDA
Tools	Git, Docker, Spark, Azure SDK, Power BI, AWS (ML services)
Machine Learning	ML algorithms (e.g., classification, clustering, SVM), NLP, NNs for physics, MLOps
Numerical Methods	FDM /FEM /FVM (for PDEs), Parallel Computing
Mathematics	process optimization theory, bayesian inference, stochastic modelling, PDEs theory
Data Analysis	descriptive statistics, feature engineering, PCA, causal inference, anomaly detection
Languages	English (Bilingual), French (Bilingual), Arabic (Native)

EXPERIENCE

Business Intelligence Intern Summer 2023
Al Barid Bank *Rabat, Morocco*

- Conducted customer segmentation and identified factors influencing subscription decisions using SQL and scikit-learn.
- Developed and tuned machine learning models (KNN, logistic regression, XGBoost) to predict customer behavior.
- Automated model selection using Azure AutoML Studio, improving efficiency and performance.
- Analyzed model performance using ROC-AUC, cross-validation, and statistical testing.

PROJECTS

N-Body Problems Simulation . Derived analytical solutions for the N-Body Problem. Implemented 4th order Runge-Kutta simulations in MATLAB, validating results against benchmarks. Conducted error analysis for numerical stability and optimized efficiency through parallelization.

Solving the 1D Viscous Burgers' Equation . Applied deep learning paradigms (PINNs and the Deep Galerkin Method) to Burgers' equation. Developed a data generation pipeline for training datasets and trained neural networks to approximate solutions under varying boundary and initial conditions. Compared the results with traditional FVM numerical solutions.

CERTIFICATS & ONLINE COURSES

Microsoft Azure Data Scientist Associate Prep Exam (DP-100) Microsoft / Coursera
MLOps — Machine Learning Operations Specialization Duke / Coursera, in progress
AWS Cloud Solutions Architect Professional Certificate AWS / Coursera, in progress

HOBBIES & INTERESTS

Chess, Motorsports, AI, Swimming