ELOUAN PULVÉRIC

Data Science & AI Engineer

Available immediately

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EXPERIENCE

AI Engineer Intern — May 2023 – Sep 2023
French Ministry of Interior – DGGN — *Issy-les-Moulineaux, France*

- Developed a sketch-to-photo generative AI system by iterating (autoencoder, U-Net, Pix2Pix cGAN) link
- Built a custom dataset (data collection, processing & augmentation)
- Explored a text-to-face pipeline (text encoder + StableDiffusion API)
- Collaborated with forensic sketch artists to align AI with investigative workflows
- Presentations and results validated as operationally promising by Gendarmerie General

Graduate Student Researcher — Aug 2022 – May 2023
HumNet Lab | California Air Resources Board — *Berkeley, CA*

- Processed Location Based Service data from 2.4M+ users to measure COVID-19 impact on statewide mobility patterns, informed California's 2030 GHG reduction policy
- Developed unsupervised GMM mode detection and semi-supervised KMeans-SVM home-change detection, applied Louvain network analysis to 8,000+ census tract commute graphs
- Published: A Data Science Framework to Measure VMT by Mode and Purpose link

ADDITIONAL EXPERIENCE

Paratrooper — Jan 2024 – Oct 2025
1st RPIMa – French Army Special Forces selection and training — *Bayonne, France*

EDUCATION

University of California, Berkeley — 2023
Master of Science in Systems Engineering – Courses: Data Science, Machine Learning and Control, Advanced Probability and Statistics, Spatial Analytics, Climate Modeling, Electric Power Systems — *Berkeley, CA*

Arts et Métiers ParisTech (ENSAM) — 2023
Master of Science in Mechanical & Industrial Engineering + Maths & Physics preparatory class — *Paris, France*

SELECTED PROJECTS

- **Aircraft Turbofan Engine RUL Prediction** link — 2026
  End-to-end predictive maintenance system for aircraft turbofan engines. RUL prediction on NASA CMAPSS dataset using Random Forest, XGBoost, sklearn Pipelines & MLflow
- **Electric Vehicles Smart Charge Scheduling** link — 2023
  UC Berkeley Master's Capstone Project: Intelligent electric vehicle charging optimization using LSTM models and convex optimization

PERSONAL

Technical Skills	Python (Tensorflow, MLFlow, Pandas/Geopandas, Keras, PyTorch, Sklearn), Git/GitHub, VSCode, SQL, Matlab, CATIA.
Area of expertise	Data Science, Data Analysis, Machine Learning, Deep Learning.
Languages	French (native), English (fluent, C1), German (B2)
Extracurriculars	Track athlete (sprint, regional level), chess player