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EDUCATION

Diplôme d'Ingénieur (Master's) | AI Specialization

Since 2023

ISEP — Paris

France

- Probability & Statistics: 20/20 (Rank 1/300+)
- Computer Vision: 17/20 (Rank 1/60)
- Physics for Digital Sciences: 16.90/20 (Rank 1/300+)
- Machine Learning: 18.14/20, Algorithms & Programming: 18.31/20, Optimization & AI: 18/20 *

* Rank not communicated for these courses.

International Integrated Cycle

2021 – 2023

ISEP – Paris

France

- Selected by ISEP as student representative for an exchange semester at HELHa

PUBLICATIONS

Improving Fast Density Peak Clustering Using Mass Distance: m-FDPC

2025

Journal of Electronic & Information Systems, Vol. 7(2), pp. 51–65

- Authors: Mouloud Merbouche, Célia Tso, Jérémie Sublime
- Published online: August 30, 2025
- [PDF available](#)

ACADEMIC PROJECTS

3D Foveal Depression Modeling from OCT

2024-2025

Computer Vision Project

ISEP

- Built a full pipeline to reconstruct the foveal pit from OCT B-scans
- Trained DeepLabV3+ for retinal layer segmentation ($F1 > 0.85$ on test set)
- Modeled the 3D surface with Difference of Gaussians (R^2 up to 0.92)

Insect Classification – Classical ML vs MobileNetV2

2024

Machine Learning / Deep Learning Project

ISEP

- Engineered 15 features (shape, color, texture) across 6 insect classes
- SVM best classical model (82% accuracy), MobileNetV2 best overall (88%)
- Studied class imbalance and preprocessing (masked vs raw images)

PROFESSIONAL EXPERIENCE

IT Project Engineer Apprentice

2024 – 2026

TotalEnergies

Courbevoie, France

- Led functional testing for a documentary database tool, coordinated users and dev teams
- Managed bug tracking and delivery quality
- Built an automation tool to convert a complex manual workflow into a reliable algorithmic process

TECHNICAL & SOFT SKILLS

- **Languages:** French (Native), English (Fluent)
- **Programming:** Python, MATLAB, Java
- **ML/DL Frameworks:** PyTorch, TensorFlow, Scikit-learn, Hugging Face
- **Soft Skills:** Teamwork, Oral Communication, Adaptability, Autonomy, Organizational Skills

Last updated on October 24, 2025