# Abdelmalek Belghomari

Master's Student in Computer Science and Artificial Intelligence Engineering

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# Experience

#### Le Crédit Lyonnais — Payment Tribe

Paris, France

Software Engineering Intern

March 2025 - Now

- Collaborating with **Payment** and **Credit Card** squads to enhance system functionality by maintaining critical backend services and implementing scalable features
- Using Java, Spring Boot, Kubernetes, Docker, Kafka, PostgreSQL, Gitlab CI/CD

Shibaura Institute Of Technology — Neural Information Systems Laboratory

Tokyo, Japan

Research Intern — Supervisor: ☑ PhD Ryosuke Hosaka

May 2024 - Aug 2024

- o Developed a Liquid State Machine, achieving accurate predictions for chaotic time-series data.
- Implemented Machine Learning, Deep Learning, and Reservoir Computing models with Spiking Neural Networks, advancing neuromorphic computing research
- o Demonstrated a rapid learning curve and adaptability to new fields, tools, and programming languages

# **Projects**

#### AI Facial Recognition Solution — ENSICAEN & GripID — 1st Place

2025

- Developed a facial recognition solution for GripID's biometric authentication system
- $\circ$  Achieved 99.8% accuracy on the LFW dataset using InceptionResNetV1

### Entrepreneurship Project — Orange Innovation Academy

2024 - Now

- Pitched my project idea, set up a business plan and developing innovative services
- o Currently developing a web-app platform for my project idea and managing a group of 6 people

Chatbot AI — LCL Hackathon & Google Cloud - Ranked: 3rd

Sept 2024

o Fine-tuned Gemini-AI using GCP and Langchain

#### AI-Driven Keystroke Analysis for Person & Text Recognition GREYC

2023 - 2024

- Worked on CNNs and Transformers (CoAtNet) for sound recognition
- o Achieved signal processing to detect keystrokes from a laptop microphone capturing the ambient noise

## ENSICAEN Goose Game — Academic project

2023

#### Education

National Engineering School of Caen (ENSICAEN) — GPA:4.0/4.0 - Ranked: 5/55 Caen, France MEng in Computer Science majoring in Artificial Intelligence, Image and Sound Sept 2021 - Aug 2025

o Coursework: Machine Learning(A.Lechervy), Deep Learning(L.Simon), Image Processing(Y.Queau), Software Architecture(R.Clouard), Software Development, Pattern Recognition(L.Brun), 3D Image Synthesis(L.Simon), Computer Architecture, Data Mining(C.Rosenberger)

Théophile Gautier Preparatory Classes — High Honours

Tarbes, France

Preparatory School for top-ranking French establishments

Sept 2018 - June 2021

o Coursework: Algebra, Analysis, Computer Science

### Skills

Languages: French (native), English (Fluent), Spanish (Intermediate), Japanese (Beginner)

Programming: C, C++, Python, Java, React.js, PHP, SQL, Kotlin, Swift, MATLAB

Technologies: TensorFlow, PyTorch, Scikit-Learn, Pandas, Google Cloud, Qt, JavaFX, Jakarta EE

Interests: Swimming (Top 160 world at my best), Entrepreneurship, Working-out, Fashion, Cuisine