

Marius Brouty

Student in third year of *Bachelor's in Computer Science* at Montpellier University. I'm currently honing my skills at **lopole** as a Full Stack developer.

[Portfolio ↗](#) [LinkedIn ↗](#) [Github ↗](#)

Informations

Birthday	08 / 06 / 2003
Mail	marius.brt.contact@gmail.com
Location	Lyon and Montpellier

Skills

- ◆ Python
- ◆ PyTorch
- ◆ NumPy
- ◆ TensorFlow
- ◆ Scikit-learn
- ◆ R
- ◆ Pandas
- ◆ Node.js
- ◆ SQL
- ◆ React
- ◆ Docker
- ◆ Git

Work Experience



lopole

Sep 2024 - Present

Fullstack Developer - Work-Study

Developed an AI chatbot using LLM and RAG to inform clients about the 2026 billing reform. Created a tool for generating and validating invoices with a sandbox API for real-time event visualization. Built an admin panel for managing Keycloak users, scheduling cron jobs, and handling PostgreSQL database schemas.



Kokodi

Nov 2024

Backend Performance Engineer - Freelance

Improved performance and scalability of a Next.js/MongoDB application, growing user base from 90k to 260k. Implemented Redis caching for expensive resources and optimized frequent database writes. Developed a Write Behind system with multithreading and bulk requests, reducing MongoDB load. Addressed scalability, reliability, and database access optimization



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Apr 2024 - July 2024

Fullstack Developer - Internship

Developed a monitoring tool for electronic invoices and EDI messages. Designed the frontend with React and the backend with Express using TypeScript. Integrated PostgreSQL, Kafka, and Socket.io for real-time notifications. Dockerized the application and deployed it on Kubernetes for scalability and resilience.

Education



Harvard Data Science certification

March 2025

Machine Learning R Language KNN Cross Validation Random Forest
Linear Regression



University of Montpellier

2022 - 2025

Bachelor's in Computer Science



Blaise Pascal High School

2018 - 2021

Technical High School Diploma in Industrial Sciences and Sustainable Development.

Projects

March 2025

Analyzing Bakery Sales Patterns and Forecasting Demand

This study examines bakery sales data to understand consumer habits, price trends, and sales predictions using machine learning.

TensorFlow Python Machine Learning
Clustering LSTM

[Read related article →](#)

September 2024 → Present

lopole Lab

A platform to test the lopole API, track invoice flows, generate invoices, and validate their format.

React PostgreSQL Keycloak Kafka

[Read related article →](#)

February 2025

Pace Copilot

A tool to generate personalized training plans using AI.

Next.js AI SDK PostgreSQL

[Read related article →](#)

November 2024

Maximizing Database Performance with Write-Behind Caching

Enhancing database efficiency under heavy write loads using a write-behind caching strategy for improved scalability and performance.

Next.js PostgreSQL Redis

[Read related article →](#)