# Lauriane Teyssier, MSc in Al

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in lauriane-teyssier

• Hoofdorp, NL (on-site/remote)

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Passionate about solving complex optimization problems and leveraging math & AI for novel understanding



## **Skills**

## Languages

French, English, German, Chinese (~)

# Coding

Python (Pytorch, Tensorflow, Pandas, Seaborn, ...), java, WandB, sql and Nosql, LTEX, Git,

#### Misc

Academic research, teaching, mutlicultural & technical communication

## **Education**

# **■** MSc in Computer Science

Tsinghua University, 2023 - 2025.
Thesis on RL (Convex Optimization, Offline RL, Statistics)
Classes: web information retrieval, NLP, ML, Big Data Processing

#### **Engineer degree**

CentraleSupélec, 2020 - 2023 Classes: Modeling, Optimization, Statistics, Algorithms, HPC.

#### French Elite Exam Preparation

Lycée Pasteur, 2018 - 2020 Classes: Math, Physics, Chemistry - top 3% of engineering students

# Misc. Experiences

**■** City Council Member

#### **▼** Volunteering

#### **Environment & Quality manager**

Ensured ISO 9001/14001 compliance for mountain sports events

#### **Scouting Logistics Manager**

Managed food supply, budget & contribute to youth education

# **Experiences**

## 2023 Project Management for Metro Maintenance (intern - 5 months)

- 1. Digitized IBM Maximo workflows, replacing Dubai metro maintenance paper tracking. Configured inspection checklists, translated operational needs into technical specs, bridged field teams with developers.
- 2. Led failure tracking and root-cause analysis for warranty claims using structured data. Reported to executives. Proposed database & process upgrades to enhance data reliability.
- 3. (side project) Built VBA-based optimization tool for maintenance scheduling, using mileage/time triggers. Keolis MHI, Dubai, UAE

## 2022 R& D Data Scientist (intern - 5 months)

Built PyTorch model estimating Scope 3 commute emissions for Deepki's SaaS platform, using European transport data, carbon datasets, and employee surveys. Integrated via internal API for seamless UI deployment; launched as a premium feature aiding real estate clients in emissions reporting & investment strategies.- Deepki, Paris, France

# **Academic Projects**

### 2024 Search Engine

Designed a professor search engine to help students choose thesis advisors. Scraped unstructured profiles with Hadoop, structured content via Hugging Face LLM, indexed with ChromaDB, developped a dynamic front end and deployed the Python API via Docker.

### Multi-Agent LLM

Developed LLM-based multi-agent political debate simulations (GPT-4) to assess human logic modeling, validated against real debate data.

#### 2023 Generative AI using GAN

Researched painter-style mimicry by comparing GAN architectures performance (StyleGAN, CycleGAN) against benchmarks.

### 2022 Optimization Algorithm for Transport Logistic

Designed a Gurobi optimization algorithm for logistics, solving a Traveling Salesman Problem (TSP).

#### **Development of an Application for Mountain Sport Race**

Co-developed a race management app: stakeholder analysis, PostgreSQL back-end, and React Native front-end (3-person team).

#### 2021 Development of a Virtual Escape Game

Co-developed a playable space game in Unity, implementing C# component interactions from initial concept to final build.