# MATTHIEU OLEKHNOVITCH

STUDENT AT ECOLE POLYTECHNIQUE & ENSAE

#### CONTACT

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Paris, France

#### SKILLS

- Python Java JS C++
- · Pytorch Keras Sklearn
- Dev Web (React, Django, php)
- SQL, Redis, DataBricks

## LANGUAGES

French - Native

English - C1 or above (107/120 TOEFL)

German - B2 Russian - A2

**PROJECTS** 

# IPPMED Hackathon - Lung Cancer detection - 2023

Team research project on computer vision. Developed and trained deep learning models for tumor cells detection. Computation realised on **Telecom Paris** supercomputer (3.5Pflops/s)

## LLM HACK - Paris 2024

Developped an autonomous agent that can explore the web to find accurate data, pack it and serve it with a personalized API. Worked with tutors from Mistral AI and HuggingFace

# Digital Services (h)Acked -Brussels 2024

Developped a RAG architecture based on LLMs to serve API documentation from scrapped data. Computed researches on french HPC 'Jean Zay'

Variational Auto-Encoderbased Auto Augmentation: **Enhancing exploratory latent** space modeling

Paper under review at ICLR2025

EDUCATION

#### 2024 - Present **ÉCOLE NATIONALE DE STATISTIQUE ET D'ADMINISTRATION ÉCONOMIQUE**(PARIS, FRANCE)

Diplôme d'ingénieur (Master of Applied Mathematics) - Finance, risk, data

Coursework include: Statistical learning, Risk Management, Machine Learning, Stochastic calculus, Pricing of financial derivatives, Algorithmic Trading, Portfolio Management

## **ECOLE POLYTECHNIQUE** (PALAISEAU, FRANCE)

Diplôme d'ingénieur (Master of Advanced engineering)

Majoring in Computer Science - GPA 3.53/4

Coursework include: Foundations of Machine learning, Machine and Deep Learning, Database Management Systems, Data Visualization

# **LYCEE PASTEUR** (NEUILLY, FRANCE)

2019 - 2021

CPGE - Preparatory classes

Majoring in Advanced Engineering and Science - GPA 4.0/4 Coursework include: Mathematics, Physics, Chemistry, Computer Science

# WORK EXPERIENCE

#### **UNIVERSITY OF LUXEMBOURG** (LUXEMBOURG)

Al Research Intern - Securiy and Trust - SERVAL Team

Apr. 2024 - Sep. 2024

Specialized in Auto Augmentation Learning techniques to enhance time series classification and forecasting metrics. Developed an advanced iteration of the AutoAugment algorithm for large-scale and complex data augmentation. Recently authored a paper on time series auto augmentation, currently under review at ICLR.

# **WORLDLINE** (LYON, FRANCE)

Jun. 2023 - Sep. 2023

Al Researcher Intern - LABS Department

Spearheaded research on Al-driven code reviewing for proactive issueforecasting in large-scale programming projects. Devised and executed comprehensive analysis processes to optimize project outcomes and data retrieval.

# BRIGADE DE SAPEURS-POMPIERS DE PARIS Oct. 2021 - Apr. 2022

Battalion Chief - Paris-13 Fire Department

Commanded emergency operations as a French army officer, leading teams of up to 15 personnel. Thrived in high-pressure environments, managing and aiding victims during critical emergencies.

REWARDS

### **Excellence Scolarship**

2019 - 2021 - Delivered by the french Ministry of Education

#### International Chemistry Olympiads

2020 - Ranked 8th in France

#### France Defence ministry bronze medal

2022 - Delivered by the french army ministry by way of exception

#### Outstanding investment award

2023 - Delivered by EcolePolytechnique for the investment in the associative life