# Matthias Cremieux

Personal Github: https://github.com/Mattcrmx Pro Github: https://github.com/matthiasmindee Rootme (top 4%) https://www.root-me.org/xcrm?lang=fr https://www.linkedin.com/in/matthias-cremieux-4b1222153/

Software engineer with a focus on production topics revolving around Deep Learning. Graduate of a MSc in executive engineering at MINES ParisTech and a MSc at Sorbonne university in Stats and ML. I'm extremely interested in OSS, low-level software engineering, infosec and computer science.

### Education and qualifications

2017 – 2021 MINES Paristech, member of PSL University, Engineering course - 3<sup>nd</sup> year, Master of science in Engineering, Option: Digital engineering of complex system (Data science).

• Computer science, Statistics, optimization, Economy, labour law

2020 - 2021 Sorbonne University, (ex-UPMC), MS - Maths and Computer science.

• Advanced Machine learning And deep learning, Reinforcement Learning and advanced Deep Learning, Computer vision

2017 Success of the competitive exam at Ecole des MINES, Preparatory class at Lycée Charlemagne PCSI/PC\*.

2015 Scientific Baccalaureate, with highest honors, Maths, Physics, Biology.

#### Experience

2021 - Now Mindee, Software Engineer in Machine Learning.

- (2+ years) Co-Development of a distributed computing library based on Directed Acyclic Graphs (https://github.com/mindee/
  - Development and optimization of a thread-safe inference framework for deep learning models in Python. Small experience with Cython.
  - Deep learning model RAM and computation time optimization (Tensorflow, ONNX) on various hardwares.
  - Deployment of applications with Kubernetes, Spinnaker and OpenLens.
  - Troubleshooting of performance issues (Flamegraphs, ptrace, strace, perf...), memory and file descriptor leaks (C).
  - Infrastructure and Deep learning models load testing (Locust, custom framework)

(6 months)

2021 Graphène Advisory - Beijaflore group, Data Scientist Intern, Research and Development on Anomaly detection with unstructured logs.

• Siamese networks approach for similarity-based learning, in real time of streaming log events parsed with state-of-the-art

2020 Schlumberger Doll Research, Computer vision research Intern, Applying Active learning techniques on the topic (6 months)

of semantic segmentation. • Built a pipeline for automatic interactive Active Learning.

2019 **PEAT GmbH**, Data scientist intern, Machine learning for a recommendation system from weather data and plants (6 months) classification using deep learning.

- Built a labelling tool for the weather data, and performed supervised learning for the farm recommendation system.
- Ornamental plants classification with deep learning.

2018 BATEG, Assistant construction site supervisor.

(1 month) • Managed a team of several people and assisted various technicians in their work in the office in charge of the structure

## Computer skills and languages

Confirmed

PYTHON, LATEX,

Intermediate Bash, Docker, Kubernetes, gdb, gunicorn, hashcat

Fluent English - C1 (TOEFL 114/120)

Intermediate Russian - TRKI (B1 level)

Rust, C, Javascript, Java, Ghidra, Wireshark Notions

#### Miscellaneous

- Student Active member (600+ students, budget of \$100k)
  - union President of a student organization (150+ students)

Sports Tennis: 15 years of on and off practice. Often competed with MINES Paristech. Rugby: 1 year of practice. Participated to several competitions with MINES Paristech.

Cultural Classical guitar: 6 years of practice; Bass Guitar: 3 years of practice. Part of the cinema club of MINES Paristech activities for 3 years