# Timothée Ly

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# **WORK EXPERIENCE**

#### **RESEARCH ON DIFFERENTIAL PRIVACY | INTERNSHIP**

LAAS-CNRS, France | Sept 2023 - Feb 2024

- Determined a tighter bound on Gini impurity sensibility and achieved higher accuracy with Smooth Sensibility on Greedy Rule Lists.
- Implemented a Differentially Private version of Corels with Laplace Mechanism.

## FOOD BANK | INTERNSHIP

## Perpignan, France | Jul 2021 - Aug 2021

- Carried out an audit of the food bank's IT equipment control of system versioning across the different units.
- End-of-line quality control Responsible for the distribution to the partnered associations Labeling of products for accounting in the food bank software Cold storage of fragile foodstuffs Warehouse manutention

## **EDUCATION**

## Diplôme d'Ingénieur (Master equivalent)

Palaiseau, France | Sept 2020 - Apr 2024

TELECOM PARIS | GPA: 4.0/4.0

MEMBER OF INSTITUT POLYTECHNIQUE DE PARIS (IP Paris) –  $48^{th}$  QS RANKING,  $14^{th}$  WORLDWIDE IN MATH 2023 Coursework: Stochastic Calculus, Continuous Time Markov Chains And Martingales, Statistics, Analysis (Fourier & Functional), Optimization, Machine Learning, Representation of Signals, Time Series, Speech and Audio Processing

#### **Double Degree**

Stockholm, Sweden | Aug 2022 - Apr 2024

KTH ROYAL INSTITUTE OF TECHNOLOGY

**Coursework:** Data Mining, Data Intensive Computing, Advanced Machine Learning, Artificial Neural Networks and Deep Architectures, Natural Language Processing, Information Retrieval Systems

#### Classes Préparatoires

Toulouse, France | Sept 2018 - Jun 2020

LYCÉE PIERRE DE FERMAT | GPA: 4.0/4.0

Two intensive years of mathematics, physics and computer science to prepare for the national competitive exams of the grandes écoles. Fermat is one of the most prestigious classes préparatoires in France.

## **PROJECTS**

# NEWS RECOMMENDATION SYSTEM ( ELASTICSEARCH, BOOLEAN QUERY, TF-IDF, COSINE SIMILARITY

A news recommendation system built on top of Elastic Search which offers boolean query retrieval and recommendations processed from the user's preferences.

# **NETWORK INTRUSION DETECTION** Decision Trees, Neural Networks, NSL-KDD, IDS2017

Two-week project aimed at improving existings Neural Network systems trained to detect network intrusion.

# VOLUNTEERING

#### FORUM ASSOCIATION | IT SECTION

Palaiseau. France | 2021 - 2022

The Telecom Paris Forum is the association responsible for the organisation of the fair where companies come to the school to meet students. As a member of the IT section, I was in charge of maintaining the website and the database.

#### MATHEMATICS AND PHYSICS TUTORING | TUTOR FOR HIGHSCHOOLERS

Remote | 2021 - 2023

# **SKILLS**

Languages: Java, C/C++, Python, SQL, Notions of JavaScript, HTML/CSS

Technology: Git, MySQL, ElasticSearch, Spark, LATEX

Languages: French (Native speaker), English (TOEFL iBT: 110/120), Spanish (B1), Chinese(B1), Swedish(A2)