THOMAS FOREST

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https://tamotoo.github.io

WORK EXPERIENCE

Freelance   **2024**
- Creation of videos to visualize mathematics courses using the Manim library

Research internship, CEA-List (Grenoble, France)   **Aug 2023 - Feb 2024**
- Digital simulation of human behavior based on cognitive architecture
- Development of a reinforcement learning environment using Gymnasium
- Discovering the world of research

Internship, Volvo (Belley, France)   **Feb 2021**
- Performed serial tasks on an assembly line

Internship, Université Savoie Mont-Blanc (USMB) (Chambéry, France)   **Mar 2018**
- Creation of a fully functional ChatBot using the university's servers (PHP/SQL)

PROJECTS

Implementation of deep learning algorithms
- "From-scratch" re-implementation of the reinforcement learning algorithms Deep Q-Network (DQN) and Deep Deterministic Policy Gradient (DDPG) as well as a Transformer using PyTorch

AI agent for a board game (Divercité)
- Participation in an AI competition. Implementation of a min-max algorithm, development of a Reinforcement Learning Agent

Traffic sign recognition system
- Creation of a dataset of annotated images, training of models using Machine Learning and then using CNNs with a 97.35% success rate for classification

EDUCATION

Polytechnique Montréal   **Aug 2024 - Aug 2026**
- Double Degree - Professional Master's Degree in Computer Engineering
- Specialization in Artifical Intelligence and Deep Learning

Université de Technologie de Compiègne (UTC)   **Aug 2022 - Aug 2026**
- Master Degree in computer engineering
- Specialization in Data Science & Artifical Intelligence

Université de Technologie de Belfort-Montbéliard (UTBM)   **Aug 2020 - Aug 2022**
- General engineering courses

ADDITIONAL INFORMATION

- **Programming languages:** Python, C++, C#, C, R
- **Librairies:** PyTorch, NumPy, Pandas, Matplotlib, OpenCV, Seaborn
- **Technologies:** Reinforcement Learning, Deep Learning, Data Visualization, Weights & Biases, Git
- **Languages:** French (Native), English (Certified)