Denis Fouchard

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Profile

Machine Learning and Computer Science student at Télécom Paris with academic experience in deep learning, NLP, and graph learning. Seeking a research-oriented internship in AI/ML.

Skills

Programming: Python (PyTorch, TensorFlow, Scikit-learn, Transformers), Java, OCaml, SQL, LaTeX

Languages: French (Native), English (C2), Spanish (B1-B2), Chinese (Beginner)

Experience

 ${\bf Group\ Consultancy\ Project-Imperial\ College\ London,\ DG\ Cities-London,\ UK}$

Apr 2025 - Jun 2025

Housing predictive maintenance using BERT-like sequential deep learning models.

Developer Intern – Dassault Systèmes / Exalead – Paris, France

Mar 2024 - Aug 2024

Prototyped a text-to-database AI agent backed by large language models (LLMs). Integrated data visualization tools within the Data Perspective Studio environment.

Machine Learning Intern - Inria Paris-Saclay - Palaiseau, France

Sep 2023 - Feb 2024

Applied ML and statistics to fMRI brain imaging. Developed alignment-based methods to predict future stimuli.

Education

Imperial College London - MEng Exchange - London, UK

Jan 2025 - Jul 2025

Courses: Advanced Deep Learning, Deep Learning for Embedded Systems

Télécom Paris, Institut Polytechnique de Paris – MSc in Computer Science – Palaiseau, France

Sep 2021 - present

Majors: Data Science / Machine Learning, Theoretical Computer Science

Lycée Carnot – Preparatory Classes – Dijon, France

Sep 2018 - Jul 2021

Mathematics, Physics, Engineering, Computer Science (CPGE - top-tier entrance training)

Projects

Brain Connectivity Super-resolution (Group competition, 2025) – Upsample fMRI connectivity matrices using Graph Neural Networks (GNNs)

Entity Typing in Knowledge Graphs (Master Project, 2025) – Fine-tuned deep learning models combining LLMs and GNNs for entity type classification

Codenames AI (Application Project, 2022) — Used graph diffusion and word embeddings (word2vec, scikit-network) to build an AI player for the game "Codenames"

Smart Pill Box (Collaborative Project, 2022) – Designed a connected smart pillbox with Android app, using Java and client-server architecture

Distributed PageRank (2021) - Developed a fast, distributed PageRank algorithm using graph clustering (Python)

Leadership & Activities

President and Founder - TéléTalks - Télécom Paris

Feb 2022 - May 2023

Founded and led a political conference association. Hosted high-profile speakers including Fields Medalist Cédric Villani and Minister Amélie de Montchalin.

Student Union Member – BDE Télécom Paris – May 2022 – May 2023

Helped organize campus life and student integration events.