

Timon Deschamps

timon.deschamps@iris.cnrs.fr · (+33) 6 33 83 51 96 · [timon.fish](#)

Education

PhD Artificial Intelligence	2023 - 2026 (expected) LIRIS, Claude Bernard Lyon 1 University
Graduate School of Engineering Computer Science	2020 - 2023 Polytechnic School of the University of Nantes, France
Two-year university preparatory cycle Mathematics, Computer Science option	2018 - 2020 University of Tours, France

Publications

- 2024 - [Multi-objective decision making workshop \(MODeM\) @ ECAI, oral presentation \(paper\)](#)
Timon Deschamps, Rémy Chaput, Laëtitia Matignon. Multi-objective reinforcement learning: an ethical perspective.
- 2024 - [Rencontre des jeunes chercheurs en intelligence artificielle \(RJCIA\) @ PFIA, oral presentation \(paper\)](#)
Timon Deschamps, Rémy Chaput, Laëtitia Matignon. Multi-objective reinforcement learning: an ethical perspective.
- 2023 - [IEEE Transactions on Visualization and Computer Graphics \(TVCG\) \(website, paper\)](#)
Qi Yang, Joel Jung, **Timon Deschamps**, Xiaozhong Xu, Shan Liu. TDMD: A Database for Dynamic Color Mesh Subjective and Objective Quality Explorations. Co-authored during an internship conducted at Tencent Media Lab.

Experience

- LIRIS, Claude Bernard Lyon 1 University** Lyon, France
PhD student Nov 2023 - Nov 2026 (expected)
Title: Multi-objective multi-agent reinforcement learning for the co-construction of ethical behaviours ([summary](#)).
Supervisor: Laëtitia Matignon
- Tencent** Remote
Research Scientist Intern Feb 2023 - Aug 2023
- Worked on Tencent Media Lab's response to the call for proposals on Static Polygonal Mesh Coding by AOMedia.
 - Developed a prediction and displacement-based scheme for efficient compression with BD-Rate gains of up to 30%.
 - Created a suite of Python data processing tools used by the team to streamline and speed up experiments.
- Airbus** Bangalore, India
Machine Learning Engineer Intern Jun 2022 - Sep 2022
- Used reinforcement learning for multi-criterion wing shape optimisation using deep learning-based surrogate models.
 - Applied various machine learning and custom deep learning models to predict drag on antenna fairings.
 - Introduced AI to the engineering team and created an interactive dashboard to speed up antenna fairing design.
- Artefakt-AI / Polytech Nantes** Nantes, France
ML Engineer / Project Manager (Part-time industrial project) Sep 2021 - May 2022
- Implemented data augmentation methods on a dental x-ray dataset using deep autoencoder-based inpainting.
- Laboratory of Digital Sciences of Nantes (LS2N) / Talend** Nantes, France
Software Engineer Intern Jun 2021 - Aug 2021
- Designed an automatic benchmark generation procedure using Bayesian Networks to test the accuracy of an outlier detection algorithm working on mixed tabular data.
- Laboratory of Fundamental and Applied Computer Science of Tours (LIFAT)** Tours, France
Machine Learning Engineer Intern Jun 2019 - Jul 2019

- Developed an interactive drawing recognition program based on convolutional neural networks (Tensorflow, Tkinter).
- Created resources to educate a diverse audience on artificial intelligence and neural networks.
- Presented the results at Tours' 2019 science fair to hundreds of visitors.

Teaching

2025 - [LIFAMI](#) (Applications of mathematics and computer science) - Lyon 1 University
36h: practical sessions for first year Bachelors students

2024 - [LIFAPI](#) (Introduction to imperative programming) - Lyon 1 University
24h: practical sessions for first year Bachelors students

References available upon request.