

Benoît Roussel

benoit.roussel@ec-lyon.fr benoitroussel.com GitHub LinkedIn Google Scholar

CURRENT POSITION



PhD student, computer vision

2023–

Idemia & Centrale Lyon · Courbevoie & Lyon



Thesis: End-to-End Multi-Object Tracker for Handling Occlusions. Detection and association trained jointly in a single model, with an eye on long-range tracking through occlusions and on the cost of the labelled video such models demand.

- ADVISORS [Liming Chen](#) ([LIRIS](#), [École Centrale de Lyon](#)) and [Pierre Perrault](#) ([Idemia](#)).
- TEACHING Lectures, lab sessions and talks on tracking and deep learning at Télécom Paris, Sorbonne (UPMC) and Centrale Lyon.
- SUPERVISION An M2 intern on real-time end-to-end multi-object tracking.

PRIOR EXPERIENCE



Semi-professional e-sport player (sabbatical)

2023

League of Legends · France

Six months competing in France’s third division league and in LAN events, with a stint in the second division; reached the top 300 players in Europe.



Research intern, computational imaging

2022

EPFL, LCAV · Lausanne

Reconstruction for lensless cameras using a generative prior. A generator pre-trained on FFHQ raised PSNR by 0.8 to 9.8 dB depending on the mask; mask creation in the lab’s libraries went from 5.57 s to 35.1 ms.



Research intern, computer vision

2021

Dassault Aviation · Saint-Cloud

Automatic aircraft anchoring, from three minutes by hand to thirty seconds. Camera calibration, dataset creation, and deployment to HoloLens through WinML and ONNX.



Research intern, machine learning

2020

ONERA, The French Aerospace Lab · Palaiseau

A self-supervised depth estimation technique used to refine the output of a model-based depth map.



Master 2 MVA (mathematics, vision, learning)

2021–2022

ENS Paris-Saclay · Gif-sur-Yvette

Graduated with high honors. Applied mathematics for data, image and signal: convex optimization, computational statistics, object recognition, 3D computer vision, point clouds, topological data analysis, graphs in machine learning.

TUTORING Undergraduate electrical engineering at Institut Villebon-Georges Charpak (Orsay): practical experiments and engineering projects, in a format adapted to a cohort recruited for potential rather than prior results.

- **ARIA, research year in artificial intelligence**

2020–2021

ENS Paris-Saclay · Gif-sur-Yvette

A research project at Centre Borelli on motor styles in healthy and pathological populations, alongside advanced MVA coursework, then six months at Dassault Aviation.

- **Formation Sapphire, then Master 1 E3A (André Ampère track)**

2018–2020

ENS Paris-Saclay · Cachan

Two years, both graduated with high honors: a multidisciplinary engineering year, whose year-long project was the fastest autonomous car the school’s Saph Team Racing competition would allow, then a master’s in electrical engineering with added coursework in AI: control systems, signal and image processing, machine learning for time series, video and images.



CPGE, physics and technology

2016–2018

Lycée Jules Ferry · Versailles

Two-year intensive preparation for the competitive entrance examinations to the French Grandes Écoles.

PUBLICATIONS

MOTIP2: Spatial Priors for End-to-End Multi-Object Tracking

B. Roussel, D. Bouet, L. Chen, P. Perrault

British Machine Vision Conference (BMVC) · 2026 · CONFERENCE · [ACCEPTED, TO APPEAR](#)

Multi-Object Tracking as Identity Correction

B. Roussel, K. Steunou, D. Martin, P. Perrault

HAL preprint · 2026 · PREPRINT

SKILLS

RESEARCH	Multi-object tracking, detection and segmentation, 3D scene understanding, computational imaging
PROGRAMMING	Python, PyTorch, PyTorch3D, JAX, C/C++, Matlab, SQL
TOOLING	Distributed training (HPC, Slurm), GCP, Linux, shell, Git, LaTeX
LANGUAGES	French (native), English (full professional, C1 Advanced), German (limited working)