

Roland Andrews

Ph.D. student in optimization and robotics



About me

Born of British and German parents, I grew up most of my life in France where I developed a passion for science. I am excited about applied mathematics and the development of artificial intelligence as I believe it will have a profound impact on the future of humanity.

Interests

Recently, at Polytechnique, I served as President of the Raid de l'X association, which organises the eponymous sporting during a week-end event for 240 participants (facebook.com/RaidX). I was also treasurer and vice-president of the theatrical improvisation club. At INRIA, I am the treasurer for the coffee machine (189 users) and one of the two organisers of the monthly Junior Seminar (www.rocq.inria.fr/semdoc/). Outside academic life, I am an avid runner and practise crossfit. I tend to spend my free time reading books on a broad range of topics (ask me about my latest one!). Together with friends, I also coded a "serious game" to help cognitive-science researcher Jérôme Sackur analyse ADHD (dromemord.github.io/PSC_TDAH).

PROFESSIONAL EXPERIENCES

2024 -present	PhD INRIA – Sierra and Willow teams PHD STUDENT · INRIA Paris	I am currently a PhD student with Adrien Taylor and Justin Carpentier working on Optimisation and robotics.
2023	Ecole Normale Supérieure RESEARCH INTERNSHIP · Paris	I worked with researcher Valentin de Bortoli on the dynamic of diffusion models.
2022	MBDA: Object detection RESEARCH INTERNSHIP · France	Research internship in multispectral object detection using deep learning.
2021	QWAM Content Intelligence Solutions INTERNSHIP · Paris	Paris-based start-up specialising in natural language processing.
2020 -2021	Oral examiner PART-TIME JOB · France	I was an oral examiner in mathematics for the MPSI students (equivalent to a selective Bachelor in mathematics and physics) of one of my former teachers.
2019 -2020	French Army TEACHING MISSION · Chad	As part of my school's program, I followed a military officer formation. I then joined the DCSD (Department of Security and Defence Cooperation) in Chad. My main mission was to teach preparation courses for the entrance examinations to some french Grandes Écoles.

STUDIES

2024 -present	PhD ROBOTICS AND OPTIMIZATION · INRIA Paris	
2022 -2023	Master 2 MVA MATHÉMATIQUES, VISION, APPRENTISSAGE · ENS Paris-Saclay	Prestigious French Master in AI.
2019 -2022	Polytechnicien program MAJOR: APPLIED MATHEMATICS · École Polytechnique	Minor: Physics, Computer Science.
2017 -2019	Classes préparatoires MATHEMATICS AND PHYSICS · Collège Stanislas, Paris	Highly selective studies to prepare for the entrance examinations to the Grandes Écoles.

PROGRAMMING

python	(advanced, jax, pytorch, ...)
C++	(intermediate level)
Rust	(beginner)

LANGUAGES

English	C1	(british father)
French	C2	native
German	B2	(german mother)

PUBLICATIONS

- 2025** *Augmented Lagrangian methods for infeasible convex optimization problems and diverging proximal-point algorithms.* Reviewed in Mathematical Programming.

TALKS

- Jul. 2025** "Safe treatment of infeasible convex optimization problems via the augmented Lagrangian", at: *ICCOPT VIII*
Jun. 2025 "The Augmented Lagrangian Method for Infeasible Convex Optimization", at: *EUROPT 2025*