Cyril Falcon

Ph.D., Professeur agrégé

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French citizenship
Born on August 4th, 1994 in Bordeaux

I hold a Ph.D. in pure mathematics and specialize in the R&D of algorithms for inertial navigation. I leverage the latest advancements in stochastic process estimation and statistical learning to introduce innovative dynamics to the forefront of the cutting-edge industry. My scientific expertise, coupled with my ability to mobilize teams, catalyzes collaborative success.

Work experience

CDI
23/05–
R&D engineer in Navigation algorithms, Exail, Saint-Germain-en-Laye.
World 1st company in advanced technologies for resilient navigation.
- Development of inertial navigation algorithms by multi-sensors data fusion.
- Design of statistical tests for validation and monitoring of navigation performance.
- Statistical modelling of sensor errors and assessment of navigation performance.
- Publication of 1 article in an international peer-reviewed journal.
- Supervision of a 6-month end-of-study internship on RNN-aided Kalman filtering.

CDD
18/08–22/08
Research scientist in Pure Mathematics, LMO (Université Paris-Saclay, CNRS), Orsay.
World 1st university in Mathematics.
- Publication of 3 articles in international peer-reviewed journals.
- Oral presentations, in French and English, of my results in about 10 seminars.
- Participation in about 100 presentations in French and English by international experts.

CDD
18/09–21/08
Teaching assistant in Mathematics, Université Paris-Saclay, Gif-sur-Yvette.
Nearly 200 hours of tutorials for about 10 groups of about 30 diverse students.

Academic background

2023
Doctoral degree in Pure Mathematics, Université Paris-Saclay.
- Laureate of a research grant from the Ministère de l'Enseignement Supérieur et de la Recherche.
- Organization of about 15 conferences for about 40 higher education students.
- Supervision of about 10 workshops for about 15 primary and secondary school pupils.
- Organization of about 30 fundraising to offer gifts for new doctors.

2018
Double degree Master–Magister in Mathematics, Université Paris-Saclay.
Laureate in 2015 and 2017 of a 10,000€ grant for excellence from the Jacques Hadamard foundation.

2017
Agrégation externe in Mathematics, 67th/3582, Ministère de l'Éducation nationale.

Computer skills

LaTeX	(scientific documents) Expertise	Inkscape	(vector graphics) Expertise
MATLAB	(numerical analysis) Advanced	SageMath	(computer algebra) Advanced
Simulink	(modelling) Intermediate	Python	(data analysis) Intermediate

Language skills

French	Mother tongue	English	Fluent

Miscellaneous interests

Sports — Swimming, running, MTB riding and mountain hiking.

Puzzles   Puzzles creation relying on steganographic methods.