Cyril Falcon

Ph.D., Professeur agrégé



Trained as a mathematician, passionate about physical sciences and highly curious about digital sciences, I am a versatile and creative person endowed with solid intuition and natural talents in communication. Constantly seeking new challenges, I am determined to use my analytical abilities and technical agility to meet innovation demands in the cutting-edge industry.

Work experience

CDI Research engineer in Navigation algorithms, Exail, Saint-Germain-en-Laye.

23/05 – World 1st company in advanced technologies for resilient navigation.

- O Development of inertial navigation algorithms by multi-sensors data fusion.
- O Design of statistical tests for validation and monitoring of navigation performance.
- Data analysis and simulations for prediction and statistical modelling of navigation errors.
- O Publication of 1 article in an international peer-reviewed journal.
- O Supervision of a 6-month end-of-study internship on the use for inertial navigation of a Kalman filter aided neural network.
- CDD Research scientist in Pure mathematics, LMO (Université Paris-Saclay, CNRS), Orsay.

18/08–22/08 World 1st university in Mathematics.

- O Publication of 3 articles in international peer-reviewed journals.
- Oral presentations, in French and English, of my results in about 10 seminars.
- O Participation in about 100 presentations in French and English by international experts.
- CDD Teaching assistant in Mathematics, Université Paris-Saclay, Gif-sur-Yvette.

18/09–21/08 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.
 - O Laureate of a research grant from the Ministère de l'Enseignement Supérieur et de la Recherche.
 - Organisation of about 15 conferences for about 40 higher education students.
 - O Supervision of about 10 workshops for about 15 primary and secondary school pupils.
 - Organisation 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 fundation.
- 2017 Agrégation externe in Mathematics, 67th/3582, Ministère de l'Éducation nationale.

Computer skills

MATLAB (numerical analysis) Advanced
Simulink (modeling) Intermediate

Inkscape (vector graphics) Expertise

SageMath (computer algebra) Advanced

Python (data analysis) Intermediate

Language skills

French Mother tongue English Fluent

Miscellaneous interests

Sports Swimming, running, MTB and mountain hiking.

Puzzles Creation of puzzles based on steganographic methods.