

Cyril Falcon

Ph.D., R&D engineer

Saint-Germain-en-Laye
Yvelines, Île-de-France

☎ 07 88 37 53 47

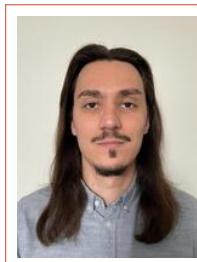
✉ falcon.cyril@gmail.com

🌐 cyril-falcon.github.com

in [falcon-cyril](https://github.com/falcon-cyril)

French citizenship

Born on August 4th, 1994 in Bordeaux



With a Ph.D. in Pure Mathematics from the Université Paris-Saclay, I work in the algorithm R&D for stochastic process detection, estimation, and forecasting, including through statistical learning applied to time series. I thrive in multidisciplinary and demanding scientific environments.

Work experience

CDI **R&D engineer in Navigation algorithms**, Exail, Saint-Germain-en-Laye.
23/05– World 1st company in advanced technologies for resilient navigation.

- Development of inertial navigation algorithms using multi-sensors data fusion.
- Design of statistical tests for performance monitoring of Kalman filters.
- Statistical modeling of sensor errors and evaluation of navigation performance.
- Supervision of a 6-month final-year internship on RNN-aided Kalman filtering.

CDD **Research scientist in Pure Mathematics**, LMO (Université Paris-Saclay, CNRS), Orsay.
18/08–22/08 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 **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.
○ 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.
2015 and 2017 laureate 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

MATLAB (numerical analysis) Advanced

Python (data analysis) Advanced

Simulink (modelling) Intermediate

Shell script (scripting) Expertise

Git (version control) Advanced

TeX (scientific documents) Expertise

Language skills

French Mother tongue

English Fluent

Miscellaneous interests

Sports Swimming, running, MTB riding and mountain hiking.

Puzzles Puzzles creation relying on steganographic methods.