# Victor Trappler

*PhD, looking for a postdoc or researcher position*

## ▬▬ Research interests

I recently got my PhD at Grenoble-Alpes University in the AIRSEA team (Inria), under the supervision of Arthur Vidard, Élise Arnaud, and Laurent Debreu. My research interests revolve mainly around **Uncertainty Quantification**, and **Inverse Problems**. More specifically, I am interested in Robust Optimization and Optimization under Uncertainties (OUU).

## ▬▬ Education

**2017–2021**    **PhD Student**, *AIRSEA, Inria/LJK*, Grenoble, France.
*Title*: Parameter control in the presence of uncertainties
*Abstract*: Classical methods of parameter estimation usually imply the minimisation of an objective function, that overlooks the role of uncertain parameters. Strategies taking into account these uncertainties need to be defined
*Keywords*: Parameter Estimation; Optimisation under Uncertainties; Data Assimilation
*Advisors*: A. Vidard, É. Arnaud, L. Debreu

**2015–2017**    **MSc Mathematical Modelling and Computation**, *Danmarks Tekniske Universitet*, Kgs. Lyngby, Denmark.
*Focus points*: Applied mathematical analysis, Dynamical Systems, Scientific Computing, Statistical modelling, Stochastic simulations

**2013–2017**    **Engineering Degree**, *École Centrale Lyon*, Écully, Interests and courses oriented toward applied mathematics.

## ▬▬ Experience

### ▬▬ Internships/Master thesis

**2017**    **Master Thesis**, *AIRSEA, Inria/LJK*, Grenoble, France.
*Title*: Parameter control in the presence of uncertainties: Robust estimation of bottom friction
*Advisors*: Uffe Høgsbro Thygesen (DTU), Élise Arnaud, Arthur Vidard, Laurent Debreu (Inria)

**2015**    **Intern**, *EDF R&D*, Chatou, France.
Developement of MATLAB tools for hydrodynamical model TELEMAC3D, with the purpose of estimating the residence time

### ▬▬ Teaching experience

**2017–2020**    **Research and Teaching Label**, *Grenoble-Alpes University*.
Specific doctoral training for students wanting to pursue an academic career, mostly on specific teaching methods and reflexions on higher education

**2017–2019**    **Teaching assistant**, *Grenoble-Alpes University*.
Lectures in calculus, algebra, and computer lab sessions in statistics for undergraduates students. Teaching time adding up to *138h*:
- L2 STA301: 90h of lab work on statistics using the R language
- L1 MIASHS: 20h of exercise sessions on calculus
- L1 MAT104: 28h of lectures and exercise sessions on geometry and algebra

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## Publications

Victor Trappler, Élise Arnaud, Arthur Vidard, and Laurent Debreu. Robust calibration of numerical models based on relative regret. *Journal of Computational Physics*, page 109952, November 2020.

## Oral and poster presentations

2020 Oral presentation at the annual GdR MASCOTNUM PhD meeting, Grenoble, France

2019 Oral Presentation at the Applied Inverse Problems Conference, in the mini-symposium "Dimension reduction in inverse problems", Grenoble, France

2018 Oral Presentation at the National Colloquium for Data Assimilation, Rennes, France

2018 Poster at the Workshop on Sensitivity Analysis and Data Assimilation in Meteorology and Oceanography, Aveiro, Portugal

## Languages and programming skills

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|---|---|---|
| Languages | French (Fluent) | *Native* |
| | English (Fluent) | *TOEFL IBT score: 105/120 (2015)* |
| | German (Intermediate) | *Adapted for casual conversations* |
| Scientific | Python 2.7, 3.5+ | *Advanced: numpy, scipy, scikitlearn & custom packages* |
| Computing | R | *Intermediate* |
| | Matlab | *Intermediate* |
| | Fortran | *Basic* |
| | C++ | *Basic* |
| Utilitaries | LaTeX | |
| | bash | |
| | git | |

## Miscellaneous

2020 **Representative of non-permanent employees**, *LJK, Grenoble.*
Elected as a representative of the non-permanent employees (PhD, interns, postdocs fellows, engineers) of the Jean Kuntzmann Laboratory. Participation at the lab council