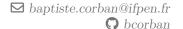
# Baptiste Corban



I am a first year PhD student between IFPEN and INRIA on the topic of decentralised learning and its industrial applications. I am using multi-agent Reinforcement Learning applied to wind farm control. I have a background in fluid dynamics and data science.

## Experience

- 2024- PhD Student, IFPEN INRIA (ARGO team), Paris
- Present Conducting research on multi-agent Reinforcement Learning applied to wind farm control
  - 2024 **Research Intern**, *IFPEN*, Rueil-Malmaison Reinforcement learning for wind farm power tracking
  - 2023 Research Intern, EPFL UNFoLD Lab, Lausanne Reinforcement learning applied to the control of a real small-scale vertical axis windturbine
- 2022–2024 **Part-time research Intern**, *ISAE Supaero*, Toulouse Deep learning for optimisation of flapping wing kinematics

### Education

- 2020–2024 Engineering degree (MSc), ISAE Supaero, Toulouse
  - Specialised in fluid dynamics (turbulence, instabilities, external aerodynamics, numerical schemes...), and Data Science (probability theory, applied mathematics, deep learning, reinforcement learning
  - 2023 Master 2 Dynamique, Energétique et Transferts, Université de Toulouse, Tuulouse Research master of fluid dynamics, with courses of aero-acoustics, aerosols, turbulence and instabilities
- 2018–2020 Preparatory Classes for the French Grandes Écoles (CPGE), Lycée Saint Louis, Paris

### Skills

- Programming Python (Pytorch, Tensorflow,...), C, Java, Fortran, R, Matlab
  - Languages French (native), English (fluent, C1), Spanish (B1), Arabic (beginner)

### — Publications

2023 B. Corban, M. Bauerheim, T. Jardin "Discovering optimal flapping wing kinematics using active deep learning", *Journal of Fluid Mechanics*, doi:10.1017/jfm.2023.832