

Orso Forghieri

PhD Student at École Polytechnique

Education

- 2022 – Present **PhD. Student**, *CMAP, École Polytechnique*,
Progressive Disaggregation for Infinite Horizon Dynamic Programming with Hind Castel, Emmanuel Hyon, Erwan Le Pennec, ICAPS 2024
Service Placement under Affine Delay Constraint for computational resources management, Nancy Perrot and Yannick Carlinet ROADEF 2022
- 2021 – 2022 **Master's Degree MVA (Mathematics, Vision, Learning)**, *École Normale Supérieure Paris Saclay*,
Optimization, Deep and Reinforcement Learning, Object Recognition
- 2018 – 2022 **École Polytechnique**, *Engineer's Degree*,
Statistical Learning, Functional analysis, Algorithmic, Machine and Deep Learning
- 2015 – 2017 **Lycée Louis-Le-Grand**,
Higher School Preparatory Classes, Mathematics, Physics (MPSI - MP)

Experience

- Sep. 2024 **École Polytechnique** *Teaching assistant in Statistics and Probabilities for Eric Moulines (MAP433), Gersende Fort (Modal) and Tabea Rebafka (Probability Refresher).*
Teaching Assistant
- April 2022 **Télécom SudParis** *Hierarchical Reinforcement Learning for large system control*
6 mth intern Reinforcement Learning applied to large dimension environments. Supervised by Hind Castel (Télécom SudParis), Erwan Le Pennec (École Polytechnique) and Emmanuel Hyon (LIP6), in collaboration with *Energy4Climate*
- April 2021 **Orange** *Combinatorial Optimization for Edge Computing*
6 mth intern Service Placement under Affine Delay Constraint for computational resources management, Supervised by Nancy Perrot and Yannick Carlinet (Orange), work published in *ROADEF 2022*
- Sept. 2020 **Applied Mathematics Center of École Polytechnique** *Compartmental Epidemiology model*
4 mth project Model for coronavirus spreading between Italy and France in February and March 2020. Impact of borders closure. Supervised by Stéphane Gaubert (INRIA Saclay)
- June 2020 **SNCF Réseau** *Boosted tree for train delay forecast*
3 mth intern Modeling delay propagation through the rail network, forecast using Boosted Decision Trees
- 2019 – 2020 **Lusis** *Market Forecast with Deep Learning methods*
8 mth project Market Forecast using Times Series tools (LSTM, NLP on news article titles, and CNN) for Lusis (Trading Solutions)

Skills

- Languages French (native), English (Fluent), German (Written)
- Programming Python (Tensorflow, Pytorch, Pyomo, Seaborn), Git, R, Java, Latex, Office

Hobbies

Sports Karate (15 years, Black Belt, local contests), Boxing (2 years, local contests)
Reading Ethic in AI, Rhetoric, Psychology