

Raphaël Avalos

Final year PhD candidate in Reinforcement Learning.

Education

- 2020–2025 ○ **PhD, Vrije Universiteit Brussel**
PhD Candidate in (Multi-Agent) Reinforcement Learning under the supervision of Prof. Ann Nowé and Dr. Diederik M. Roijers.
- 2018–2019 ○ **MSc Applied Mathematics for AI, ENS Paris-Saclay MVA, Highest Honor**
The MVA Masters program offers advanced mathematical and experimental training in analysis, geometry, and probability, to prepare students for a research career in artificial intelligence.
- 2016–2019 ○ **Engineer in Computer and Data Science, Telecom Paristech, GPA 3.96**
Telecom ParisTech is one of the top French public institutions of higher education and research (Grandes Ecoles) of engineering in France.
- 2014–2016 ○ **Preparatory Classes, Lycee Stanislas, GPA 3.91**
Two years of intensive study in Mathematics and Physics to prepare the national engineering school admission competitive exam.

Awards

- 2023 ○ **Best Paper Award, Benelux Conference on Artificial Intelligence**
- 2020 ○ **Fundamental Research Fellowship, Research Foundation – Flanders (FWO)**
PhD fellowship for 4 years.

Selected Publications

📄 Full list: <https://scholar.google.com/citations?user=nWm5tucAAAAJ>

- ICLR 2024 The Wasserstein Believer: Learning Belief Updates for Partially Observable Environments through Reliable Latent Space Models
Raphaël Avalos, Florent Delgrange, Ann Nowé, Guillermo A. Pérez, Diederik M. Roijers
International Conference on Learning Representations
- RLC 2024 Online Planning in POMDPs with State-Requests
Raphaël Avalos, Eugenio Bargiacchi, Ann Nowé, Diederik M. Roijers, Frans A Oliehoek
Reinforcement Learning Conference
- TMLR 2023 Local Advantage Networks for Cooperative Multi-Agent Reinforcement Learning
Raphaël Avalos, Mathieu Reymond, Ann Nowé, Diederik M. Roijers
Transaction in Machine Learning Research

Experience

- 2024–2025 ○ **Research Intern, Cohere**
4 months research internship working on Large Language Models.
- 2024 ○ **Program Chair, Adaptive Learning Agents Workshop at AAMAS 2024**
- 2023 ○ **Local Chair, European Workshop on Reinforcement Learning**
- 2023 ○ **Research Visit, TU Delft**
4 months research visit under the supervision of Prof. F. Oliehoek working on planning in POMDPs.
- 2020 ○ **Research Internship, Vrije Universiteit Brussel**
4 months research internship under the supervision of Prof. A. Nowé working on Multi-Agent RL.
- 2019 ○ **Research Internship, INRIA - SequeL Team**
6 months research internship under the supervision of Prof. P. Preux and Dr. F. Strub working on RL.

Skills

- Languages French native, Spanish bilingual, English fluent - *TOFEL iBT 103/120*.
- Computer Linux, Python, C++, Bash, \LaTeX .
- ML Jax, Tensorflow, Pytorch.
- Hobbies Cooking, Travelling, Hiking, Diving, and recently Kite-Surfing.