RACHELSON Emmanuel (ORCID: 0000-0002-8559-1617)

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- **CURRENT POSITION**

  Professor, ISAE-SUPAERO, Toulouse, France.

- **EDUCATION**

2020	HDR, Université Toulouse Capitole
2009	PhD, ISAE-SUPAERO, Toulouse, France
2005	MS and ME, Université Paul Sabatier and ISAE-SUPAERO

- **INTERNATIONAL RECOGNITION (honors, prizes)**
  - Co-chair of the "AI for traffic management and large scale urban mobility" ANITI 1 chair
  - Oral spotlight at ICML 2022 for the "Large Batch Experience Replay" paper
  - Invited speaker at the 2022 Mobilit.AI forum
  - Best paper at the 2008 French machine learning conference
- **SUPERVISION AND SCIENTIFIC LEADERSHIP**
  - 15 PhD students (7 on-going), 2 post-docs, 7 MS interns.
  - Head of the Supaero Reinforcement Learning Initiative (SuReLI) at ISAE-SUPAERO
  - Former head of the Decision Systems research group at ISAE-SUPAERO
  - Co-founder of the Toulouse Interdisciplinary Deep Learning Group (TIDDLE)
  - Elected Professor to the ISAE-SUPAERO board of directors
  - Member of the board of the Doctoral School of Toulouse on Mathematics, Computer Science, and Telecommunications at the University of Toulouse
- **SCIENTIFIC PRODUCTION:** https://scholar.google.fr/citations?user=KtG9BSgAAAAJ
- **5 MOST RELEVANT PAPERS (10 last years), Google Scholar Id: KtG9BSgAAAAJ**

1. Bertoin, D., Zouitine, A., Zouitine, M., & Rachelson, E. (2022). Look where you look! Saliency-guided Q-networks for generalization in visual Reinforcement Learning. *Advances in Neural Information Processing Systems*, *35*.
2. Lahire, T., Geist, M., & Rachelson, E. (2022). Large Batch Experience Replay. In *International Conference on Machine Learning* (pp. 11790-11813). PMLR.
3. Maile, K., Rachelson, E., Luga, H., & Wilson, D. G. (2022). When, where, and how to add new neurons to ANNs. In *International Conference on Automated Machine Learning*. PMLR.
4. Bertoin, D., & Rachelson, E. (2022). Local Feature Swapping for Generalization in Reinforcement Learning. In *The Tenth International Conference on Learning Representations 2022*.
5. Lecarpentier, E., & Rachelson, E. (2019). Non-stationary Markov decision processes, a worst-case approach using model-based reinforcement learning. *Advances in neural information processing systems*, *32*.

- **EDITORIAL AND ADVISING ACTIVITIES**
  - General chair of the 2024 European Workshop on Reinforcement Learning (Toulouse)
  - Program chair of the 2023 European Workshop on Reinforcement Learning (Brussels), 250 attendees
  - Program chair of the 2020 Reinforcement Learning Virtual School (online), 1500+ attendees
  - General chair of the 2019 French conference on Planning, Decision and Learning for Systems Operation (Toulouse), 80 attendees
  - Program committee of major ML and AI conferences and journals, e.g. NeurIPS, ICLR, ICML, IJCAI, AAAI, etc.
  - External reviewer on 12 PhD theses
  - Scientific advisor for the Reev and Unsupervised.ai start-ups
- **COLLABORATIONS:** Michael Littman at Brown University, Matthieu Geist at Google Deepmind, Liam Paull at Université de Montréal, Vincent François-Lavet at VU Amsterdam, Olivier Sigaud at Sorbonne Université, Andrea Lodi at Cornell University, Vera Pancaldi at INSERM, M. Bauerheim at ISAE-SUPAERO.
- **TEACHING ACTIVITIES (current or planned)**: co-head of the Data and Decision Sciences master program at ISAE-SUPAERO, lecturing on Machine Learning and Optimization in different master programs.