Salem Lahlou

Assistant Professor of Machine Learning

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Research interests: AI for science tools, generative flow networks, LLM Reasoning.

Experience

- Sep 2024 Assistant Professor of Machine Learning, MBZUAI, Abu Dhabi.
 - 2024 Senior Researcher, Technology Innovation Institute, Abu Dhabi.
 - 2017 Data Scientist, Booking.com, Amsterdam.

Internships

- 2020 Researcher, Google Research, Paris.
- 2015 Researcher, IBM Research, Singapore.
- 2014 Data Scientist, Infosys, Bangalore.

Education

- 2018 2023 Mila Université de Montreal, Montréal Canada, PhD, Supervisor : Yoshua Bengio.
- 2015 2016 Ecole Normale Supérieure, Cachan France, M.Sc.
- 2012 2016 Ecole Polytechnique, Palaiseau France, M.Sc.

Selected publications (* denotes equal contribution in authorship)

- 2023 A Theory of Continuous Generative Flow Networks, Salem Lahlou, Tristan Deleu, Pablo Lemos, Dinghuai Zhang, Alexandra Volokhova, Alex Hernández-García, Lena Nehale Ezzine, Yoshua Bengio, Nikolay Malkin. ICML 2023.
- 2022 **GFlowNets and variational inference**, Nikolay Malkin*, Salem Lahlou*, Tristan Deleu*, Xu Ji, Edward Hu, Katie Everett, Dinghuai Zhang, Yoshua Bengio. ICLR 2023.
- 2022 **GFlowNet Foundations**, Yoshua Bengio*, Salem Lahlou*, Tristan Deleu*, Edward J. Hu, Mo Tiwari, Emmanuel Bengio. JMLR 2023.
- 2021 **DEUP**: Direct Epistemic Uncertainty Estimation, Salem Lahlou*, Moksh Jain*, Hadi Nekoei, Victor I Butoi, Paul Bertin, Jarrid Rector-Brooks, Maksym Korablyov, Yoshua Bengio. TMLR 2023.
- 2018 BabyAI: A Platform to Study the Sample Efficiency of Grounded Language Learning, Maxime Chevalier-Boisvert*, Dzmitry Bahdanau*, Salem Lahlou, Lucas Willems, Chitwan Saharia, Thien Huu Nguyen, Yoshua Bengio. ICLR 2019.
- 2016 A Nash equilibrium formulation of a tradable credits scheme for incentivizing transport choices: From next-generation public transport mode choice to HOT lanes, Salem Lahlou, Laura Wynter. Transportation Research Part B 2017.