

Leroy Pascal

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Single · Belgian
28/08/92 (Liège – Belgium)
Driving license B

EDUCATION

08.2018 – PRESENT

PHD STUDENT IN MACHINE LEARNING

Faculty of applied sciences, University of Liege, Belgium

- Advisors: Damien Ernst and Jonathan Pisane.
- Focus on multi-agent reinforcement learning.

09.2016 – 09.2018

MASTER'S DEGREE IN COMPUTER SCIENCE AND ENGINEERING

Faculty of applied sciences, University of Liege, Belgium

- Master thesis: Automatic defect recognition in X-ray imaging by machine learning (in collaboration with X-Ray Imaging Solutions).
- Cum Laude.

09.2010 – 09.2016

BACHELOR'S DEGREE IN ENGINEERING

Faculty of applied sciences, University of Liege, Belgium

WORK EXPERIENCE

08. 2018 – PRESENT

MONTEFIORE INSTITUTE, UNIVERSITY OF LIEGE, BELGIUM

Research engineer

Projects with industrial consortia of Belgian companies:

- IRIS: responsible for the design of environments and algorithms for multi-agent reinforcement learning for decision-aid. Partners: JCD, ACIC, Multitel, ERM.
- IADAS: responsible for reducing and optimising neural networks for embedding in drones and satellites. Partners: Deltatec, ALX Systems, Spacebel, Multitel.

10. 2017 – 12. 2017

X-RAY IMAGING SOLUTIONS – LIEGE, BELGIUM

Student trainee

- Development of image processing filters dedicated to X-ray image optimisation.

PERSONAL EXPERIENCE

09. 2014 – 09. 2016

AGEL ASBL – LIEGE, BELGIUM

Treasurer (2014-2015) and President (2015-2016)

- The “Association Générale des Étudiants Liégeois” is a non-profit organisation in charge of the holding of main student events (turnover > €300k, 15000 students).
- As Treasurer, responsible for the financial viability and accounting management.
- As President, responsible for managing the team, public communication and major choices.

09. 2013 – 09. 2016

FEDE ULIEGE ASBL – LIEGE, BELGIUM

Elected member of the general assembly and member of the Board of Directors of Ulg (2015-2016)

- The “Fédération des étudiants ULiège” is a non-profit organisation in charge of representing students to academic authorities (23000 ULiège students).
- Member of the Board of Directors of the University of Liege to represent the Fede and the students.

PUBLICATIONS

2023	IMP-MARL: a Suite of Environments for Large-scale Infrastructure Management Planning via MARL. NeurIPS-23: Datasets and Benchmarks <u>Pascal Leroy</u> , Pablo G. Morato, Jonathan Pisane, Athanasios Kolios and Damien Ernst.
2022	Value-based CTDE methods in symmetric two-team Markov Game: from cooperation to team competition. NeurIPS-22: Deep Reinforcement Learning Workshop. <u>Pascal Leroy</u> , Jonathan Pisane and Damien Ernst.
2020 - 2021	QVMix and QVMix-Max: extending the deep quality-value family of algorithms to cooperative multi-agent reinforcement learning. AAAI-21: Workshop on Reinforcement Learning in Games. <u>Pascal Leroy</u> , Damien Ernst, Pierre Geurts, Gilles Louppe, Jonathan Pisane, and Matthia Sabatelli.

TEACHING

2020-21-22-23	Optimal decision-making for complex problems.
2020	Advanced Machine Learning.
2019-20	Introduction to artificial intelligence.
2019-20	Complementary computer science course.

PERSONAL SKILLS

Language	<i>French</i> : Native <i>English</i> : Professional proficiency
Programming	Python, Git, Bash, C, C++, Java, Matlab
Libraries	PyTorch, TensorFlow, Numpy, Matplotlib, PyMarl, RLlib, TorchRL, Gym,...