MIGUEL SUAU

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EDUCATION

PhD student in Artificial Intelligence   September 2018 - May 2023
Delft University of Technology

· ERC Project INFLUENCE.
· Thesis: Reinforcement Learning through the Lens of Probabilistic Graphical Models.

Master of Science in Mathematical Modelling and Computation   September 2016 - July 2018
Technical University of Denmark

· Focus area: Machine learning and Scientific computing
· Master's Thesis with Lars Kai (CogSys DTU). Reinforcement learning and multi-agent systems using Unity ML-Agents.
· GPA: 11.08/12.00

Bachelor's degree in Energy Engineering   Sep 2010 - Feb 2015
Technical University of Madrid   *School of Industrial Engineering*

· Focus area: Energy technologies
· Bachelor's Thesis with Carlos Veganzones (Electrical Systems ETSII): Design and construction of a small-scale wind turbine.
· Cum Laude

SELECTED PUBLICATIONS

M. Suau, J. He, M. M. Çelikok, M. T. J Spaan, F. A. Oliehoek. Distributed Influence-Augmented Local Simulators for Parallel MARL in Large Networked Systems. NeurIPS 2022.

M. Suau, J. He, M. T. J Spaan, F. A. Oliehoek. Influence-Augmented Local Simulators: A Scalable Solution for Fast Deep RL in Large Networked Systems. ICML 2022.

J. He, M. Suau, H. Baier, M. Kaisers, F. A. Oliehoek. Online Planning in POMDPs with Self-Improving Simulators. IJCAI 2022.

M. Suau, J. He, M. T. J. Spaan, F. A. Oliehoek. Speeding up Deep RL through Influence-augmented Local Simulators. AAMAS 2022.

M. Suau, J. He, E. Congeduti, J. He, R.A.N. Starre, A. Czechowski, F. A. Oliehoek. Influence-aware Memory Architectures for Deep Reinforcement Learning in POMDPs. Neural Computing and Applications, Springer Journal, 2022.

M. Suau, A. Agapitos, D. Lynch, D. Farrell, M. Zhou, A. Milenovic. Offline Contextual Bandits for Wireless Network Optimization Offline RL workshop, NeurIPS 2021.

J. He, M. Suau, F.A. Oliehoek. Influence-augmented Online Planning for Complex Environments. NeurIPS 2020.

M. Suau, E. Congeduti, R.A.N. Starre, A. Czechowski, F.A. Oliehoek. Influence-based Abstraction in Deep Reinforcement Learning. Workshop on Adaptive Learning Agents, AAMAS 2019.

SELECTED TALKS

Berkeley MARL Seminar 2022 - Scaling up MARL: Distributed Simulation of Large Networked Systems.

ICML 2022 Baltimore - Influence-Augmented Local Simulators.

CIG 2018 Maastricht - Unity ML-Agents Tutorial.

TEACHING AND SUPERVISION

Deep Learning Lecturer   Jan 2019 - June 2022
Delft University of Technology, Netherlands

· CSE2530, Computational Intelligence.

Supervised 2 Master's and 3 Bachelor's Students

· Nele Albers, Deniz Hofmeister, Sven Holtrop, Lucas Crijns, Cian Jansen.

INDUSTRY EXPERIENCE

JP Morgan AI Research   June 2022 - Dec 2022
AI Research Associate Program, London, United Kingdom

· Learning Implicit Portfolio Optimizers in Hindsight

Huawei Research   May 2021 - October 2021
PhD Research Intern, Dublin, Ireland (Remote)

· Offline Contextual Bandits for Wireless Network Optimization

Unity Technologies   July 2017 - August 2018
Business Intelligence Analyst, Copenhagen, Denmark

· Data mining, visualization, statistical analysis, and machine learning.

NTT Data   February 2016 - July 2016
Solutions Assistant, Madrid, Spain

· Designed and tested software to prevent money laundering for financial institutions.

SAMPOL Ingenieria y Obras   Summer periods 2013 and 2014
Technician in Energy Production, Palma de Mallorca, Spain

· Energy efficiency studies in co-generation plants, biomass, fuel, and gas.

TECHNICAL SKILLS

Knowledge	Machine learning, deep learning and reinforcement learning
	Data mining and data visualization
	Numerical algorithms and optimization
	Parallel programming and GPU computing
Programming languages	C, C++, UNIX shell, Python, Tensorflow,
	Keras, Pytorch, SQL, R, Matlab, CUDA
Operating systems	Linux, Windows
Software	Excel, Tableau, Power BI, Unity, AutoCAD.