MIGUEL SUAU

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EDUCATION

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

- ERC Project INFLUENCE: Influence-based decision-making in uncertain Environments.
- Investigating novel ways of abstraction to find lower dimensional representations of complicated systems.
- Modelling the influence that the different components in a dynamical system exert on each other.

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

- Focus area: Machine learning and Scientific computing
- Completed 120 ECTS in the fields of machine learning, reinforcement learning, signal processing, multivariate statistics, data analysis, time series analysis, high performance computing, model predictive control, dynamical systems, numerical optimization.
- GPA: 11.08/12.00

Master's Thesis January 2018 - July 2018
Reinforcement learning and multi-agent systems *Unity Technologies, Cognitive Systems DTU*

- Presented tutorial on Unity ML-Agents in CIG, Maastricht, August 2018

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

- Focus area: Energy technologies
- Completed 240 ECTS in the fields of energy systems, nuclear power, thermodynamics, fluid mechanics, electrical networks and systems, environmental engineering and sustainability.

Bachelor's Thesis July 2015 - Feb 2015
Design and construction of a small scale wind turbine *Electrical Engineering Department, ETSII*

- 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. Preprint.

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, 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.

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

TEACHING AND SUPERVISION

Lecturer in Deep Learning 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.

PROFESSIONAL EXPERIENCE

AI Research Program June 2022 - Dec 2022
JP Morgan AI Research, London *Host: Sumitra Ganesh*

PhD Research Intern May 2021 - October 2021
Huawei Ireland Research Center, Remote *Host: Alexandros Agapitos*

· Offline Contextual Bandits for Wireless Network Optimization

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

· Providing design support for the development of business intelligence solutions by applying data mining and visualization techniques.
· Performing statistical analysis for the marketing team using machine learning algorithms to define targets, predict customer behavior and increase profitability.

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

· Designing and testing software aimed at preventing money laundering for financial institutions using Norkom Technologies.
· Managing and analysing large datasets of bank transactions in R.
· Running complex database queries, implementing new functions, procedures and triggers, editing tables and creating virtual views in Oracle PL/SQL.

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

· Energy efficiency studies in co-generation plants, biomass, fuel and gas applying optimization methods in MATLAB.
· Financial evaluation of energy production projects using Excel.
· Getting in contact with prospective clients and giving technical advise.