

# Simo Alami Chehboune

<http://www.lix.polytechnique.fr/~alamichehboune/> • +33(0)6 47 66 14 68 • mohamed.alami-chehboune@polytechnique.edu

---

## EDUCATION

2019-2022	<b>ECOLE POLYTECHNIQUE</b> <i>Ph.D. in Mathematics/Artificial Intelligence</i> <b>Supervisor: Pr. Jesse Read</b> Subject: <i>A distributional Perspective on Inverse Reinforcement Learning and Meta-Learning</i>	Paris, France
2018-2019	<b>CENTRALESUPÉLEC</b> <i>MSc. in Artificial Intelligence</i> Relevant coursework: <i>Machine Learning, Deep Learning (Part of ENS MVA Program), Optimization, Artificial Intelligence, Statistics, Natural Language Processing, Big Data Algorithms, Network Science Analytics, Reinforcement Learning (MVA), Graphical Models (MVA), Computer Vision</i>	Paris, France
2016-2018	<b>UNIVERSITE PIERRE ET MARIE CURIE (PARIS VI)</b> <i>Bachelor in Pure Mathematics and Physics</i> Passed the second year as an independent candidate (distance education)	Paris, France
2013-2017	<b>EDHEC BUSINESS SCHOOL</b> <i>MSc. in Corporate Finance and Banking (Grande Ecole Program)</i>	Nice, France
2011-2013	<b>IPESUP, CLASSES PRÉPARATOIRES</b> Dedicated to the preparation of the competitive entrance examinations for top ranked Business Schools	Paris, France
2008-2011	<b>LYCÉE LYAUTEY</b> French Baccalauréat, Scientific section, obtained with high honours	Casablanca, Morocco

---

## PROFESSIONAL EXPERIENCE

2020-2023 (3 years)	<b>ECOLE POLYTECHNIQUE</b> <i>Teaching Assistant</i> <ul style="list-style-type: none"><li>• <b>Master Level:</b><ul style="list-style-type: none"><li>❖ Advanced Topics in AI, Advanced Machine Learning and Autonomous Agents</li></ul></li></ul>	Paris, France
Nov 21-May 23 (6 months)	<b>ACCENTA</b> <i>Visiting Researcher (gap year)</i> Subject: <i>Inverse Reinforcement Learning methods for carbon emission minimization</i> <ul style="list-style-type: none"><li>• Using Inverse RL methods for scaling existing RL algorithms using multi-agent systems</li><li>• Investigating Inverse RL methods for multi-objective optimization</li><li>• Using Inverse RL to guarantee transferability and robustness of existing algorithms</li></ul>	Paris, France
Nov 19-Nov 23 (4 years)	<b>LIX (POLYTECHNIQUE COMPUTER SCIENCE LAB) AND IRT SYSTEMX</b> <i>Ph.D. Student</i> <ul style="list-style-type: none"><li>• Subject: <i>A distributional Perspective on Inverse Reinforcement Learning and Meta-Learning</i></li><li>• Topic includes: Machine/Deep Learning, Reinforcement Learning, Metric Learning, Optimization, Representation Learning, Graphs</li></ul>	Paris, France
Apr 19-Aug 19 (5 months)	<b>INRIA, MAGRIT TEAM</b> <i>Research Intern, Supervised by Pr. Marie-Odile Berger and Pr. Gilles Simon</i> <ul style="list-style-type: none"><li>• Subject: <i>Deep Learning Methods for 6DoF Pose Estimation</i></li><li>• Implemented a pixel-wise depth augmented version of Mask-RCNN</li><li>• Created a COCO like adaptation of Linemod Dataset for depth and mask inference Report and detailed results available on my website above</li></ul>	Nancy, France

- Mar 16-Aug 16 **SOCIÉTÉ GÉNÉRALE CIB** Paris, France  
(6 months) ***Front Office IT Commando, Tactical Tools Development***
- Developed Front Office Tactical Tools for Commodities Traders (VBA, SQL, Python)
  - Developed an interface allowing a more efficient calculation of Stress Test Shocks for commodities
  - Created and improved risk reports (Stress Test, VAR, SVAR, Sensitivities, Greeks) sent to ECB
  - Monitored and implemented Financial Regulation (FED, Volcker).
- Aug 15-Feb 16 **SOCIÉTÉ GÉNÉRALE CIB** Paris, France  
(6 months) ***Trader Assistant, Exotic and Hybrid Derivatives***
- Produced the daily P&L of structured products activity
  - Priced Equity and Hybrid exotic products: Autocalls, Digitals, Dual Range Accruals, Varswaps
  - Produced daily risk analysis reports: Spot, Volatility, Rates, Forex, Stress Tests, Greeks
- 

#### **LANGUAGES & COMPUTER SKILLS**

- Fluent in French, Arabic and English
  - Python, Tensorflow, Pytorch, SQL, R, Matlab, VBA, MapReduce, Hadoop, Spark, Bloomberg
- 

#### **PUBLICATIONS**

- *Transferable Deep Metric Learning for Clustering*. Mohamed ALAMI, Rim KADDAH, , Jesse READ. [IDA 2023](#)
- *CAMEO: Curiosity Augmented Metropolis for exploratory optimal policies*. Mohamed ALAMI, Fernando LLORENTE, Rim KADDAH, Luca MARTINO, Jesse READ. [EUSIPCO 2022](#)
- *Conv-NILM-Net, a causal and multi-appliance model for energy source separation*, Mohamed ALAMI, Jérémie DECOCK, Rim KADDAH, Jesse READ, [ECML 2022](#), MLBEM Workshop