Massimo Caccia

Curriculum Vitae

Department of Computer Science
Université de Montréal
(+1) 514-503-8403
massimo.p.caccia@gmail.com
My Webpage
Github *Linkedin*

Education

2017–present **PhD, Computer Science**, *Université of Montréal, Quebec Artificial Intelligence Institute (Mila)*.
Currently focused on Continual Learning

2013–2017 **Master of Science, Financial Engineering**, *HEC Montréal*.
Thesis: Option Pricing and Hedging for Discrete Time Autoregressive Hidden Markov Model

2010–2013 **Bachelor of Science, Mathematics & Finance**, *Université de Montréal*.
With honors. Topics: Actuarial science, Financial mathematics, Statistics, and more

Publications

In Conference Proceedings

2020 **Massimo Caccia**, Pau Rodriguez, Oleksiy Ostapenko, Fabrice Normandin, Min Lin, Lucas Caccia, Issam Laradji, Irina Rish, Alexande Lacoste, and David Vazquez. Online fast adaptation and knowledge accumulation: a new approach to continual learning. In *Advances in Neural Information Processing Systems (NeurIPS)*, 2020.

2020 **Massimo Caccia***, Lucas Caccia*, William Fedus, Hugo Larochelle, Joelle Pineau, and Laurent Charlin. Language gans falling short. In *International Conference on Learning Representation (ICLR)*, 2020.

2020 Alexandre Lacoste, Pau Rodríguez, Frédéric Branchaud-Charron, Parmida Atighehchian, **Massimo Caccia**, Issam Laradji, Alexandre Drouin, Matt Craddock, Laurent Charlin, and David Vázquez. Synbols: Probing learning algorithms with synthetic datasets. In *Advances in Neural Information Processing Systems (NeurIPS)*, 2020.

2020 Lucas Caccia, Eugene Belilovsky, **Massimo Caccia**, and Joelle Pineau. Online learned continual compression with adaptative quantization module. In *International Conference on Machine Learning (ICML)*, 2020.

2019 Rahaf Aljundi*, Lucas Caccia*, Eugene Belilovsky*, **Massimo Caccia***, Min Lin, Laurent Charlin, and Tinne Tuytelaars. Online continual learning with maximal interfered retrieval. In *Advances in Neural Information Processing Systems (NeurIPS)*, 2019.

Book Chapters

2018 **Massimo Caccia** and Bruno Rémillard. Option pricing and hedging for discrete time autoregressive hidden markov model. In *Innovations in Insurance, Risk- and Asset Management*. Springer Proceeding in Mathematics & Statistics, 2018.

Workshops Papers

2020 **Massimo Caccia**, Pau Rodriguez, Oleksiy Ostapenko, Fabrice Normandin, Min Lin, Lucas Caccia, Issam Laradji, Irina Rish, Alexandre Lacoste, David Vazquez, et al. Online fast adaptation and knowledge accumulation: a new approach to continual learning. *CVPR Workshop on Continual Learning*, 2020.

2019 Cem Subakan*, **Massimo Caccia***, and Laurent Charlin. Continual learning of generative models with maximum entropy generative replay. In *ICML Workshop on Continual Learning*, 2019.

2019 Rahaf Aljundi*, Lucas Caccia*, Eugene Belilovsky*, **Massimo Caccia***, Min Lin, Laurent Charlin, and Tinne Tuytelaars. Online continual learning with maximal interfered retrieval. In *ICML Workshop on Continual Learning (Spotlight Talk)*, 2019.

2018 **Massimo Caccia***, Lucas Caccia*, William Fedus, Hugo Larochelle, Joelle Pineau, and Laurent Charlin. Language gans falling short. In *NeurIPS Workshop on Critiquing and Correcting Trends in Machine Learning (Spotlight Talk)*, 2018.

Work Experience

January 2020 – present ***Deep Learning Researcher***, *ElementAI*.
Developing novel machine learning algorithms, particularly deep learning models for continual learning.

September 2016 – present ***Deep Learning Researcher***, *Quebec Artificial Intelligence Institute (Mila)*.
Developing novel machine learning algorithms, particularly deep learning models for continual learning.

June 2017 – August 2017 ***Deep Learning Intern***, *Spotify*.
Applying deep learning solutions for music recommendations.

July 2015 – September 2016 ***Data Scientist***, *LightspeedPOS*.
Using data mining, machine learning and data engineering for data-driven decision making. Mainly working in Python.

July 2014 – April 2015 ***Quantitative Analyst — Algorithmic Trading***, *Nymbus Capital*.
Researching new algorithmic trading strategies in the futures market (commodities, fixed income and currencies) using financial modelling and machine learning. Mainly working in Matlab and C#.

January 2012 – June 2012 ***Assistant Investment Consultant (internship)***, *AON*.

Organization

2020 **CVPR Workshop on Continual Learning (CLVision)**, *Challenge Chair*.

Awards & Scholarships

2016 **EY's Entrepreneurship Bursary**, EY's Bursary program aims to reward the students with the best business plan.

2015 **Health Promotion Innovation Challenge**, Hackaton focused on health promotion. Grand Prize for the application "SocialAngel".

2015 **The Canadian Derivatives Exchange Scholars Program**, Scholarship awarded to the most innovative research project on derivatives in Canada.

2015 **Financiere Sun Life Scolarship (M.Sc.)**, Bursary awarded to the students who are working on risk management related to insurance and who demonstrate exceptional skills and/or results.

2015 **Departement of Management Science Scholarship**, Awarded to top students in the department of Decision Sciences.

2014 **Fondation Francis et Genevieve Melançon Scholarship**, Awarded to top students at HEC Montréal.

Teaching Assistantship

Fall, 2020 **Machine Learning**, HEC Montréal.

Fall, 2019 **Machine Learning**, HEC Montréal.

Winter, 2016 **Financial Mathematics**, HEC Montréal.

Fall, 2015 **Statistics, Financial Mathematics**, HEC Montréal.

Winter, 2015 **Calculus**, HEC Montréal.

Fall, 2014 **Business Analytics**, HEC Montréal.

Reviewing

Conferences

2020 **NeurIPS, IJCAI**.

Workshops

2020 **MAIS, LifelongML (ICML), CL-ICML (ICML), CLVISION (CVPR)**.

2019 **MAIS**.