

# Gonçalo Mordido

[✉ goncalomordido@gmail.com](mailto:goncalomordido@gmail.com)

[🌐 https://goncalomordido.github.io](https://goncalomordido.github.io)

[GitHub](#)

[Scholar](#)

## Work Experience

2022 – Now	<b>Mila - Quebec AI Institute (Canada)</b> <i>Postdoctoral Fellow</i> <ul style="list-style-type: none"><li>• Fair and robust deep learning [3, 4, 5, 6].</li><li>• Mentored a total of 7 Ph.D. and 5 M.Sc. students, and supervised 2 interns.</li><li>• Awarded an <i>excellence scholarship</i>.</li><li>• <i>Advisors:</i> Sarah Chandar François Leduc-Primeau</li></ul>	[3] <b>Fairness-aware structured pruning in Transformers.</b> <i>AAAI 2024</i> A. Zayed, <u>G. Mordido</u> , S. Shabanian, I. Baldini, S. Chandar
2017 – 2021	<b>Hasso Plattner Institute (Germany)</b> <i>Research Associate &amp; Ph.D. Candidate</i> (4 years) <ul style="list-style-type: none"><li>• Diversification, compression, and evaluation of generative models [8, 9, 10].</li><li>• Mentored 7 M.Sc. students and 1 intern.</li><li>• Graduated with <i>great distinction</i>.</li><li>• <i>Advisors:</i> Christoph Meinel Haojin Yang</li></ul>	[4] <b>Training DNNs resilient to adversarial and random bit-flips by learning quantization ranges.</b> <i>TMLR 2023</i> K. Chitsaz, <u>G. Mordido</u> , J. David, F. Leduc-Primeau.
Fall 2020	<b>NVIDIA (Germany)</b> <i>Research Intern</i> (4 months) <ul style="list-style-type: none"><li>• Compression of deep neural networks via random matrices [1, 7].</li><li>• Awarded a <i>recognition award</i> for "exceptional and outstanding contributions".</li><li>• <i>Host:</i> Alexander Keller</li></ul>	[5] <b>Deep learning on a healthy data diet: Finding important examples for fairness.</b> <i>AAAI 2023</i> A. Zayed, P. Parthasarathi, <u>G. Mordido</u> , H. Palangi, S. Shabanian, S. Chandar.
Fall 2018	<b>NVIDIA (Germany)</b> <i>Research Intern</i> (6 months) <ul style="list-style-type: none"><li>• Compression of deep neural networks via pruning and quantization [2].</li><li>• <i>Host:</i> Alexander Keller</li></ul>	[6] <b>Improving meta-learning generalization with activation-based early-stopping.</b> <i>CoLLAs 2022</i> S. Guiroy, C. Pal, <u>G. Mordido</u> , S. Chandar.

## Education

2017 – 2021	<b>Hasso Plattner Institute (Germany)</b> <i>Ph.D. in Artificial Intelligence</i> <ul style="list-style-type: none"><li>• <i>Grade:</i> <i>Magna cum laude</i></li></ul>
2012 – 2017	<b>Universidade Nova de Lisboa (Portugal)</b> <i>B.Sc. and M.Sc. in Computer Engineering</i> <ul style="list-style-type: none"><li>• <i>Grades:</i> A</li></ul>

## Honors & Awards

2023	<b>Excellence scholarship.</b> <i>Fonds de Recherche du Québec</i>
2021	<b>Honors Ph.D. graduation.</b> <i>Hasso Plattner Institute</i>
2020	<b>Recognition award.</b> <i>NVIDIA</i>
2015	<b>Best final year B.Sc. project.</b> <i>Universidade Nova de Lisboa</i>
2015	<b>First place at hackathon.</b> <i>Universidade Nova de Lisboa</i>

## Patents

- [1] **Incorporating a ternary matrix into a neural network.**  
A. Keller, G. Mordido, M. Keirsbilck. 2022.
- [2] **Representing a neural net utilizing paths within the network to improve a performance of the neural net.**  
A. Keller, G. Mordido, N. Gamboa, M. Keirsbilck. 2019.

## Selected Publications

[3]	<b>Fairness-aware structured pruning in Transformers.</b> <i>AAAI 2024</i> A. Zayed, <u>G. Mordido</u> , S. Shabanian, I. Baldini, S. Chandar
[4]	<b>Training DNNs resilient to adversarial and random bit-flips by learning quantization ranges.</b> <i>TMLR 2023</i> K. Chitsaz, <u>G. Mordido</u> , J. David, F. Leduc-Primeau.
[5]	<b>Deep learning on a healthy data diet: Finding important examples for fairness.</b> <i>AAAI 2023</i> A. Zayed, P. Parthasarathi, <u>G. Mordido</u> , H. Palangi, S. Shabanian, S. Chandar.
[6]	<b>Improving meta-learning generalization with activation-based early-stopping.</b> <i>CoLLAs 2022</i> S. Guiroy, C. Pal, <u>G. Mordido</u> , S. Chandar.
[7]	<b>Compressing 1D time-channel separable convolutions using sparse random ternary matrices.</b> <i>Interspeech 2021</i> <u>G. Mordido</u> , M. Keirsbilck, A. Keller.
[8]	<b>Assessing image and text generation with topological analysis and fuzzy logic.</b> <i>WACV 2021</i> <u>G. Mordido</u> *, J. Niedermeier*, C. Meinel.
[9]	<b>Mark-Evaluate: Assessing language generation using population estimation methods.</b> <i>COLING 2020</i> <u>G. Mordido</u> , C. Meinel.
[10]	<b>microbatchGAN: Stimulating diversity with multi-adversarial discrimination.</b> <i>WACV 2020</i> <u>G. Mordido</u> , H. Yang, and C. Meinel.

## Selected Activities

2022 – Now	<b>Organizer.</b> <i>Workshop on Hardware-Aware Efficient Training (ICML'22), Conference on Lifelong Learning Agents (CoLLAs'22), Chandar Research Lab Symposium at Mila (CRL'22,23).</i>
2017 – Now	<b>Reviewer.</b> <i>EMNLP'23, ACL'23, ICML'22 WS, EMNLP'21, EACL'21, CVPR'21, Knowledge-Based Systems, ACL'20, EMNLP'20, WACV'20, ICIS'19, Neural Comp. &amp; App., IEEE Access'18, Big Data'17.</i>
2017 – Now	<b>Invited speaker.</b> <i>Mila (2022, 2023), MIT (2021), UBC (2021), GTC (2021), SAP TechEd (2017).</i>

## Teaching

Winter 2022	<b>Neural Networks.</b> <i>Guest Lecturer; Poly MTL</i>
Fall 2022	<b>Machine Learning.</b> <i>Lead TA, Poly MTL</i>
2017 – 2020	<b>Deep Learning.</b> <i>TA, Hasso Plattner Institute</i>

## Selected Skills

Python (PyTorch, TensorFlow, Hugging Face, NumPy), C++