Gonçalo Mordido

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Work Experience

2022 – Now | **Mila - Quebec AI Institute** (Canada)
Postdoctoral Fellow
- Fair and efficient deep learning [3, 4, 5, 6].
- Mentored a total of 7 Ph.D. and 5 M.Sc. students, and supervised 2 interns.
- Awarded an *excellence scholarship*.
- *Advisor*: Sarath Chandar

2017 – 2021 | **Hasso Plattner Institute** (Germany)
Research Associate & Ph.D. Candidate (4 years)
- Diversification, compression, and evaluation of generative models [8, 9, 10].
- Mentored 7 M.Sc. students and 1 intern.
- Graduated with *great distinction*.
- *Advisor*: Christoph Meinel

Fall 2020 | **NVIDIA** (Germany)
Research Intern (4 months)
- Compression of deep neural networks via random matrices [1, 7].
- Awarded a *recognition award* for "exceptional and outstanding contributions".
- *Host*: Alexander Keller

Fall 2018 | **NVIDIA** (Germany)
Research Intern (6 months)
- Compression of deep neural networks via pruning and quantization [2].
- *Host*: Alexander Keller

Education

2017 – 2021 | **Hasso Plattner Institute** (Germany)
Ph.D. in Artificial Intelligence
- *Grade*: *Magna cum laude*

2012 – 2017 | **NOVA University Lisbon** (Portugal)
B.Sc. and M.Sc. in Computer Science & Engineering
- *Grades*: *A*

Honors & Awards

2023 | **Excellence scholarship**. *Fonds de Recherche du Québec*

2021 | **Honors Ph.D. graduation**. *Hasso Plattner Institute*

2020 | **Recognition award**. *NVIDIA*

2015 | **Best final year B.Sc. project**. *NOVA University Lisbon*

2015 | **First place at hackathon**. *NOVA University Lisbon*

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 (check Google Scholar for full list)

[3] | **Fairness-aware structured pruning in Transformers.** *AAAI 2024*
A. Zayed, G. Mordido, S. Shabanian, I. Baldini, S. Chandar

[4] | **Training DNNs resilient to adversarial and random bit-flips by learning quantization ranges.** *TMLR 2023*
K. Chitsaz, G. Mordido, J. David, F. Leduc-Primeau.

[5] | **Deep learning on a healthy data diet: Finding important examples for fairness.** *AAAI 2023*
A. Zayed, P. Parthasarathi, G. Mordido, H. Palangi, S. Shabanian, S. Chandar.

[6] | **Improving meta-learning generalization with activation-based early-stopping.** *CoLLAs 2022*
S. Guiroy, C. Pal, G. Mordido, S. Chandar.

[7] | **Compressing 1D time-channel separable convolutions using sparse random ternary matrices.** *Interspeech 2021*
G. Mordido, M. Keirsbilck, A. Keller.

[8] | **Assessing image and text generation with topological analysis and fuzzy logic.** *WACV 2021*
G. Mordido*, J. Niedermeier*, C. Meinel.

[9] | **Mark-Evaluate: Assessing language generation using population estimation methods**. *COLING 2020*
G. Mordido, C. Meinel.

[10] | **microbatchGAN: Stimulating diversity with multi-adversarial discrimination**. *WACV 2020*
G. Mordido, H. Yang, and C. Meinel.

Selected Activities

2022 – Now | **Organizer**. *Workshop on Hardware-Aware Efficient Training* (ICML'22), *Conference on Lifelong Learning Agents* (CoLLAs'22), *Chandar Research Lab Symposium* at Mila (CRL'22,23).

2017 – Now | **Reviewer**. *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. & App., IEEE Access'18, Big Data'17.*

2017 – Now | **Invited speaker**. *Mila (2022, 2023), MIT (2021), UBC (2021), GTC (2021), SAP TechEd (2017).*

Teaching

Fall 2022 | **Machine Learning**. *Lead TA, Poly MTL*

Winter 2022 | **Neural Networks**. *Guest Lecturer, Poly MTL*

2017 – 2020 | **Deep Learning**. *TA, Hasso Plattner Institute*

Selected Skills

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