

João Monteiro

INRS-EMT, 800 Rue de la Gauchetière Ouest
Montreal, Canada
joaomonteirof@gmail.com

EDUCATION	<i>Institut National de la Recherche Scientifique</i> Ph.D. candidate Montreal, Canada	January 2017 - Present
	<i>University of Pernambuco</i> Master of Science in Computer Engineering Recife, Brazil	August 2015 - December 2016
	<i>University of Pernambuco</i> Bachelor in Mechanical Engineering Recife, Brazil	August 2007 - June 2012
RESEARCH INTERESTS	Machine learning: Robustness against adversaries and out-of-distribution data, generative modeling, few-shot learning.	
	Speech processing: Speaker and spoken language modelling, speech recognition.	
EXPERIENCE	Research	
	<i>Borealis AI,</i> Research intern - Robust learning	May 2021 - August 2021
	<i>Google,</i> Research intern - Out-of-distribution robustness	September 2020 - April 2021
	<i>Huawei Noah's Ark Lab - Montreal,</i> Research intern - Cross-speaker speech recognition	July 2019 - February 2020
	<i>Centre de Recherche Informatique de Montreal,</i> Student researcher - Speaker and language recognition	January 2018 - March 2021
	Industry	
	<i>Fiat Chrysler Automobiles - Brazil,</i> Manufacturing Analyst	March 2014 - November 2016
	<i>Gerdau Group - Brazil,</i> Process Engineer	November 2011 - March 2014
	<i>Gerdau Group - Brazil,</i> Engineering Intern	March 2010 - November 2011

SELECTED PUBLICATIONS

- **J. Monteiro**, X. Gibert, J. Feng, V. Dumoulin, D.S. Lee “Domain Conditional Predictors for Domain Adaptation”, Pre-registration workshop at NeurIPS, 2020. ([Link to paper.](#))
- **J. Monteiro**, I. Albuquerque, J. Alam, R. D. Hjelm, T. Falk “An end-to-end approach for the verification problem: learning the right distance”, 37th International Conference on Machine Learning (ICML), 2020. arXiv:2002.09469
- I. Albuquerque, **J. Monteiro**, M. Darvishi, T. Falk, I. Mitliagkas “Generalizing to unseen domains via distribution matching”, Uncertainty and Robustness in Deep Learning Workshop at ICML, 2020. arXiv:1911.00804
- **J. Monteiro**, J. Alam, T. Falk, “An Ensemble Based Approach for Generalized Detection of Spoofing Attacks to Automatic Speaker Recognizers”, 45th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2020.
- M. Ravanelli, J. Zhong, S. Pascual, P. Swietojanski, **J. Monteiro**, J. Trmal, Y. Bengio, “Multi-task self-supervised learning for Robust Speech Recognition”, 45th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2020. arXiv:2001.09239
- **J. Monteiro**^{*}, I. Albuquerque^{*}, T. Doang, B. Considine, T. Falk, I. Mitliagkas, “Multi-objective training of Generative Adversarial Networks with multiple discriminators”, 36th International Conference on Machine Learning (ICML), 2019. arxiv:1901.08680 **Equal contribution*
- T. Doan, **J. Monteiro**, I. Albuquerque, B. Mazoure, A. Durand, J. Pineau, R. D. Hjelm. “Online Adaptive Curriculum Learning for GANs”, The 33rd AAAI Conference on Artificial Intelligence, 2019. arXiv:1808.00020
- **J. Monteiro**, J. Alam, T. H. Falk, “End-to-end Detection of Attacks to Automatic Speaker Recognizers with Time-attentive Light Convolutional Neural Networks”, IEEE MLSP, 2019.
- **J. Monteiro**, J. Alam, “Development of Voice Spoofing Detection Systems for 2019 Edition of Automatic Speaker Verification and Countermeasures Challenge”, IEEE ASRU, 2019.
- **J. Monteiro**, J. Alam, T. H. Falk, “Residual Convolutional Neural Network with Attentive Feature Pooling for End-To-End Language Identification from Short-Duration Speech”, Computer Speech and Language.
- **J. Monteiro**, J. Alam, T. H. Falk, “Combining Speaker Recognition and Metric Learning for Speaker-Dependent Representation Learning”, Interspeech, 2019.
- **J. Monteiro**, I. Albuquerque, Z. Akhtar and T. Falk. “Generalizable Adversarial Examples Detection Based on Bi-model Decision Mismatch”, IEEE SMC, 2019.
- G. Bhattacharya, **J. Monteiro**, J. Alam, and P. Kenny. “SpeakerGAN: Recognizing Speakers in New Languages using Generative Adversarial Networks”, Interpretability and Robustness for Audio, Speech and Language Workshop at the 32nd NeurIPS, 2018.
- G. Bhattacharya, **J. Monteiro**, J. Alam, and P. Kenny. “Generative Adversarial Speaker Embedding Networks for Domain-Robust End-to-End Speaker Verification”, 44th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2019.
- **J. Monteiro**, L. A. Gómez, “Resonant third order nonlinear optical susceptibility of gold nanoparticles”. Journal of the Optical Society of America B, 2012.

RELEVANT COURSEWORK	Theoretical Principles for Deep Learning (IFT6085 - Université de Montréal, A+)
	<ul style="list-style-type: none"> • Project repository: https://github.com/joaomonteirof/hGAN
	Probabilistic Graphical Models (IFT6269 - Université de Montréal, A)
	<ul style="list-style-type: none"> • Project and assignments repository: https://github.com/joaomonteirof/ift6269 • Project report: http://bit.ly/pgm-final-report
	Multi-modal Signal Processing (Institut National de la Recherche Scientifique, A+)
	<ul style="list-style-type: none"> • Project repository: https://github.com/joaomonteirof/emotion_recognition
	Deep learning (IFT6266 - Université de Montréal, A)
	<ul style="list-style-type: none"> • Project blog: https://ift6266h17jbmf.wordpress.com/
SCHOLARSHIPS	<ul style="list-style-type: none"> • Programme de Bourse du CRIM pour Études Supérieures, 2018/2019, 2019/2020 • CNPq (Brazil) undergraduate young researcher scholarship, 2009
OTHER	<ul style="list-style-type: none"> • Academic service: Reviewer for AISTATS'21, ICML'20/21, NeurIPS'20, and IEEE Signal Processing Letters. • Invited talks: The verification problem and its applications to voice biometrics (Huawei Noah's Ark lab - November 2019) • Language: Portuguese (native), English (fluent), Italian (advanced), French (beginner)
Github	https://github.com/joaomonteirof
Google Scholar	https://scholar.google.ca/citations?user=hk047vsAAAAJ&hl=en