

ARTUR JORDÃO LIMA CORREIA

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EDUCATION

- 2020** PhD degree in Computer Science, Federal University of Minas Gerais, Brazil. Smart Sense Laboratory.
- 2016** MSc. degree in Computer Science, University of Minas Gerais, Brazil. Smart Sense Laboratory.
- 2013** B.Sc degree in Computer Science, University of Western São Paulo, Presidente Prudente – São Paulo, Brazil.

PROFESSIONAL ACTIVITY

- 2023 - current** Assistant Professor, University of São Paulo (USP)
- 2021 - 2023** Post Doctoral, Universidade Estadual de Campinas
- 2022** Professor, Universidade Federal de São Carlos.

PROJECTS

- 2024 – current** Efficient Language Models and Advances in Data Distillation in Natural Language Processing. Funding Agency: Centro de Ciência de Dados (C2d).
- 2023 – current** GreenAI: Reducing the Environmental Impact of Artificial Intelligence through Efficient Neural Networks. Funding Agency: National Council for Scientific and Technological Development (CNPq). Grant: 402734/2023-8
- 2023 – current** DeepPruning: Efficient Neural Networks by Exploring Pruning Techniques. Funding Agency: São Paulo Research Foundation (FAPESP). Grant: 2023/11163-0

SCHOLARSHIPS RECEIVED

- 2017 – 2020** Brazilian National Council for Scientific and Technological Development (CNPq). PhD. Scholarship. Research on compression and acceleration of deep networks.
- 2016** Foundation for Research Development (FUNDEP) in partnership with SAMSUNG. Research Scholarship. Research on human activity recognition. Federal University of Minas Gerais, Brazil. Smart Sense Laboratory.
- 2014 – 2016** Coordination for the Improvement of Higher Education Personnel (CAPES). Masters Scholarship. Research on visual computing and machine learning algorithms related to the surveillance.

AWARDS

- 2021** 2nd Place in the Competition on Domain Adaptation and Generalization for Character Classification. International Conference on Pattern Recognition (ICPR), 2024.
- 2021** (Co-advisor) Best Paper Student Award: Detection and classification of animal crossings on roads using IoT-based WiFi sensing, IEEE LatinCom.
- 2021** Finalist of the XXXIV Concurso de Teses e Dissertações (CTD) 2021 – XLI Congresso da Sociedade Brasileira de Computação (CSBC), ranking among the top 6 (out of 46) best theses.
- 2021** Best PhD Thesis (Edition 2021) of the Graduate Program in Computing Science of the Federal University of Minas Gerais - Computer Science Department.
- 2021** Honorable Mention in Theses Grand Prize from the Federal University of Minas Gerais.

PROFESSIONAL SERVICE ACTIVITY

Journal Reviewer

- Neural Processing Letters
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Information Forensics and Security
- Springer Pattern Recognition Letters
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- Springer Knowledge-Based Systems
- IEEE Transactions on Emerging Topics in Computing
- IEEE Sensors Journal
- Springer Pattern Recognition Letters
- Nature Scientific Reports
- Frontiers Neuroinformatics
- IEEE Access
- Springer The Visual Computer
- Sensors MDPI

Conference Reviewer

- Computer Vision and Pattern Recognition (CVPR)
- Conference on Artificial Intelligence (AAAI)
- International Conference on Pattern Recognition (ICPR)
- Winter Conference on Applications of Computer Vision (WACV)
- Conference on Graphics, Patterns and Images (SIBGRAPI)
- Symposium Series on Computational Intelligence (SSCI)

PUBLICATIONS

Conference papers

- 2024 Pons, I. ; Yamamoto, B. ; Costa, A. H. R. ; Jordão, A. **Effective Layer Pruning Through Similarity Metric Perspective**. International Conference on Pattern Recognition (ICPR), 2024.
- 2024 Pons, I. ; Yamamoto, B. ; Costa, A. H. R. ; Jordão, A. **Effective Layer Pruning Through Similarity Metric Perspective**. International Conference on Machine Learning (ICML) Workshop on Advancing Neural Network Training (WANT), 2024.
- 2024 Barros, M.; Jordão, Artur et al. **Early Detection of Extreme Storm Tide Events Using Multimodal Data Processing**. In: Conference on Artificial Intelligence (AAAI), 2024.
- 2023 Jordão, Artur; Araújo, George; Maia, Helena; Pedrini, Hélio. **When Layers Play the Lottery, all Tickets Win at Initialization**. In IEEE/CVF International Conference on Computer Vision (ICCV).
- 2021 Jordão, Artur; Pedrini, Hélio. **On the Effect of Pruning on Adversarial Robustness**. In IEEE/CVF International Conference on Computer Vision (ICCV).
- 2021 Jordão, Artur; Lie, Maiko ; de Melo, Victor Hugo Cunha; Schwartz, William Robson. **Covariance-free Partial Least Squares: An Incremental Dimensionality Reduction Method**. In Winter Conference on Applications of Computer Vision (WACV).
- 2020 Jordão, Artur; Lie, Maiko ; Yamada, Fernando; Schwartz, William Robson. **Stage-Wise Neural Architecture Search**. In International Conference on Pattern Recognition (ICPR).
- 2019 Jordão, Artur; Kloss, Ricardo; Yamada, Fernando; Schwartz, William Robson. **Pruning Deep Convolutional Networks Using Partial Least Squares**. In British Machine Vision Conference (BMVC) Workshops: Embedded AI for Real-Time Machine Vision.
- 2018 Jordao, Artur; Kloss, Ricardo; Schwartz, William Robson. **Latent Hypernet: Exploring The Layers of Convolutional Neural Networks**. In International Joint Conference on Neural Networks (IJCNN).
- 2018 Barbosa Kloss, Ricardo; Jordao, Artur; Schwartz, William Robson. **Face Verification: Strategies For Employing Deep Models**. In IEEE International Conference on Automatic Face and Gesture Recognition (FG).
- 2017 Barbosa Kloss, Ricardo; Jordão, Artur; William Schwartz. **Boosted Projection: An Ensemble Of Transformation Models**. In Iberoamerican Congress on Pattern Recognition (CIARP).
- 2016 Jordao, Artur; De Souza, Jessica Sena; Schwartz, William Robson. **A Late Fusion Approach To Combine Multiple Pedestrian Detectors**. In International Conference on Pattern Recognition (ICPR).
- 2016 Correia, Artur; Schwartz, William Robson. **Oblique Random Forest Based On Partial Least Squares Applied To Pedestrian Detection**. In IEEE International Conference on Image Processing (ICIP).

Journal papers

- 2023 Jordao, Artur; Souza, João; Kuroda, Michelle; Rezende, Marcelo; Pedrini, Hélio; Vidal, Alexandre. **Towards automatic and accurate core-log processing.** In Journal of Applied Geophysics.
- 2021 Sena, Souza; Jordao, Artur; Schwartz, William Robson. **A Content-Based Late Fusion Approach Applied to Pedestrian Detection.** In Journal of Visual Communication and Image Representation.
- 2020 Jordao, Artur; Yamada, Fernando; Schwartz, William Robson. **Deep Network Compression based on Partial Least Squares.** In Neurocomputing.
- 2020 Jordao, Artur; Lie, Maiko; Schwartz, William Robson. **Discriminative Layer Pruning for Convolutional Neural Networks.** In IEEE Journal of Selected Topics in Signal Processing.
- 2018 Jordao, Artur; Torres, Leonardo Antônio Borges; Schwartz, William Robson. **Novel Approaches To Human Activity Recognition Based On Accelerometer Data.** In Signal, Image And Video Processing.

PATENTS

- 2018 **US 16/033,847** - Method and system for sensor data recognition using data enrichment for the learning process.
- 2018 **BR 10 2017 026251 0** - Metodo e Sistema de Reconhecimento de dados de sensor utilizando o enriquecimento de dados para o processo de aprendizagem. (in Portuguese)