ARTUR JORDÃO LIMA CORREIA

University of São Paulo (USP)   Email: arturjordao[at]usp.br
Assistant Professor   Homepage: http://arturjordao.github.io
São Paulo, SP, Brazil

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   (Advisor) Top 3 undergraduate research work in Concurso de Trabalhos de Iniciação Científica (CTIC) of Sociedade Brasileira de Computação (SBC).

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

2025   do Nascimento G.; Pons I.; Costa, A. H. R. ; Jordão, A. **Pruning Everything, Everywhere, All at Once**. International Joint Conference on Neural Networks (IJCNN), 2025.

2025   Mugnaini, L. G. ; Yamamoto, B. L. ; Alcantar, L. L. ; Bollis, E. ; Pellicer, L. ; Costa, A. H. R. ; Jordão, A. **Efficient LLMs with AMP: Attention Heads and MLP Pruning**. International Joint Conference on Neural Networks (IJCNN), 2025.

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)