## 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**

**2023 – current** Green AI: 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 SAM-SUNG. 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** (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

2023 – current	Neural Processing Letters
2022	Sensors MDPI
2021 – 2022	IEEE Transactions on Neural Networks and Learning Systems
2021 – 2022	IEEE Transactions on Information Forensics and Security
2021 – current	Springer Pattern Recognition Letters
2020 – current	IEEE Transactions on Pattern Analysis and Machine Intelligence
2020 – current	Springer Knowledge-Based Systems
2020 – current	Nature Scientific Reports
2020 – current	IEEE Transactions on Emerging Topics in Computing
2020 – current	Frontiers Neuroinformatics
2019 – current	IEEE Access
2019 – current	Springer The Visual Computer
2017 – 2019	IEEE Sensors Journal
2017 - 2018	Springer Pattern Recognition Letters

# Conference Reviewer

2023	IEEE Winter Conference on Applications of Computer Vision (WACV)
2022	IEEE Conference on Graphics, Patterns and Images (SIBGRAPI)
2022	IEEE Winter Conference on Applications of Computer Vision (WACV)
2021	IEEE Winter Conference on Applications of Computer Vision (WACV)
2019	IEEE Symposium Series on Computational Intelligence (SSCI)

#### **PUBLICATIONS**

#### Conference papers

- 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).
- 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).
- 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

- 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.
- 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)