

Curriculum Vitae

PERSONAL DATA

NAME: Saulo Martiello Mastelini
NATIONALITY: Brazil
DATE OF BIRTH: 15/02/1993
PLACE OF BIRTH: Cândido de Abreu, Brazil
EMAIL: saulomastelini@gmail.com
WEBSITE: <https://smastelini.github.io/>
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PROFESSIONAL EXPERIENCE

01/2023-ongoing | *Artificial Intelligence (AI) Consultant at Volt Robotics*
Worked on creating Machine Learning (ML) forecasting and clustering models for the electricity market, and applying Explainable AI (XAI) to better understand the Brazilian electricity system dynamics

03/2023-11/2023 | *Machine Learning lecturer in the Software Engineering specialization of the State University of Londrina*
Taught the course: Introduction to Data Science with Python

2020-2021 | *Teaching assistant in the Data Science MBA of the Institute of Mathematics and Computer Science - University of São Paulo*
Mentored students and taught the practical aspects of using Python tools in the Machine Learning course

OPEN SOURCE CONTRIBUTIONS

River | *Maintainer and founding member of the Online Machine Learning library*
<https://riverml.xyz>
Github stars: 4.8k
Downloads: 650k

EDUCATION

06/2018-02/2023 | PhD in COMPUTER SCIENCE AND COMPUTATIONAL MATHEMATICS, **University of São Paulo, São Carlos, Brazil**. Thesis title: *Efficient online tree, rule-based and distance-based algorithms*. Supervisor: André Carlos P. L. F. de Carvalho

02/2022-09/2022 | VISITING RESEARCHER at **LIAD (INESC TEC) and Faculdade de Economia da Universidade do Porto**, Porto, Portugal
Supervisor: João Gama

03/2016-02/2018 | MSc in COMPUTER SCIENCE, **State University of Londrina, Londrina, Brazil**
Supervisor: Sylvio Barbon Jr.

2012-2016 | BSc in COMPUTER SCIENCE with honors, **State University of Londrina, Londrina, Brazil**
Supervisor: Sylvio Barbon Jr.

SCIENTIFIC PRODUCTION INDICATORS

ORCID: <https://orcid.org/0000-0002-0092-3572>
Google Scholar: <https://scholar.google.com.br/citations?hl=en&user=eBtNmMEAAAAJ>
ResearchGate: https://www.researchgate.net/profile/Saulo_Mastelini
h-index: 19
Total citations: 1036

LANGUAGE SKILLS

ENGLISH: Advanced
PORTUGUESE: Native
SPANISH: Basic

RECENT RELEVANT PUBLICATIONS

Articles published in journals:

- Mastelini, S. M., Veloso, B., Halford, M., de Leon Ferreira, A. C. P., & Gama, J. (2024). SWINN: Efficient nearest neighbor search in sliding windows using graphs. *Information Fusion*, 101, 101979.
- Mastelini, S. M., Nakano, F. K., Vens, C., & de Leon Ferreira, A. C. P. (2022). Online Extra Trees Regressor. *IEEE Transactions on Neural Networks and Learning Systems*.
- Mastelini, S. M., Cassar, D. R., Alcobaça, E., Botari, T., de Carvalho, A. C., & Zanotto, E. D. (2022). Machine learning unveils composition-property relationships in chalcogenide glasses. *Acta Materialia*, 240, 118302.
- Mastelini, S. M., & de Leon Ferreira, A. C. P. (2021). Using dynamical quantization to perform split attempts in online tree regressors. *Pattern Recognition Letters*, 145, 37-42.
- Montiel, J., Halford, M., Mastelini, S. M., Bolmier, G., Sourty, R., Vaysse, R., ... & Bifet, A. (2021). River: machine learning for streaming data in Python. *Journal of Machine Learning Research*, 22, 1-8.

Articles published in conferences:

- Mastelini, S. M., Montiel, J., Gomes, H. M., Bifet, A., Pfahringer, B., & de Carvalho, A. C. (2021, December). Fast and lightweight binary and multi-branch Hoeffding Tree Regressors. In *2021 International Conference on Data Mining Workshops (ICDMW)* (pp. 380-388). IEEE.
- Gomes, H. M., Montiel, J., Mastelini, S. M., Pfahringer, B., & Bifet, A. (2020, July). On ensemble techniques for data stream regression. In *2020 International Joint Conference on Neural Networks (IJCNN)* (pp. 1-8). IEEE.

SCHOLARSHIPS AND CERTIFICATES

04/2016-03/2018 | CAPES Scholarship for MSc
01/08/2018-14/02/2023 | FAPESP grant #2018/07319-6, Multi-target regression stream mining
25/03/2018-31/07/2022 | FAPESP grant #2021/10488-7, Online Nearest Neighbor Search

COMPUTER SKILLS

Basic Knowledge: HTML, CSS, Javascript, annoy, pytorch, tensorflow, Rust
Intermediate Knowledge: R, C/C++, Java, shap
Advanced Knowledge: river, scikit-learn, numpy, pandas, Python, xgboost, lightgbm, sktime