

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/>

PROFESSIONAL EXPERIENCE

2020-2021 | Teaching assistant in the Data Science MBA of the Institute of Mathematics and Computer Science - University of São Paulo

EDUCATION

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

06/2018-02/2023 | PhD in COMPUTER SCIENCE AND COMPUTATIONAL MATHEMATICS, **University of São Paulo**, São Carlos, Brazil
Supervisor: André Carlos P. L. F. de Carvalho

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

2012-2016 | BSc in COMPUTER SCIENCE, **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: 14
Total citations: 613

LANGUAGE SKILLS

ENGLISH: Advanced
PORTUGUESE: Native
SPANISH: Basic

RECENT RELEVANT PUBLICATIONS

Articles published in journals:

- 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.

- Cassar, D. R., Mastelini, S. M., Botari, T., Alcobaça, E., de Carvalho, A. C., & Zanotto, E. D. (2021). Predicting and interpreting oxide glass properties by machine learning using large datasets. *Ceramics International*, 47(17), 23958-23972.
- Mastelini, S. M., Cassar, D. R., Alcobaça, E., Botari, T., de Carvalho, A. C., & Zanotto, E. D. (2021). Machine learning unveils composition-property relationships in chalcogenide glasses. *arXiv preprint arXiv:2106.07749*.
- 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.
- Mastelini, S. M., Santana, E. J., Cerri, R., & Barbon Jr, S. (2020). DSTARS: a multi-target deep structure for tracking asynchronous regressor stacking. *Applied Soft Computing*, 91, 106215.
- Alcobaça, E., Mastelini, S. M., Botari, T., Pimentel, B. A., Cassar, D. R., de Leon Ferreira, A. C. P., & Zanotto, E. D. (2020). Explainable machine learning algorithms for predicting glass transition temperatures. *Acta Materialia*, 188, 92-100.
- Mastelini, S. M., Sasso, M. G. A., Campos, G. F. C., Schmiele, M., Clerici, M. T. P. S., Barbin, D. F., & Barbon, S. (2018). Computer vision system for characterization of pasta (noodle) composition. *Journal of Electronic Imaging*, 27(5), 053021.
- Santana, E. J., Geronimo, B. C., Mastelini, S. M., Carvalho, R. H., Barbin, D. F., Ida, E. I., & Barbon, S. (2018). Predicting poultry meat characteristics using an enhanced multi-target regression method. *Biosystems engineering*, 171, 193-204.

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.
- Mastelini, S. M., & Ponce de Leon Ferreira de Carvalho, A. C. (2020, October). 2CS: correlation-guided split candidate selection in Hoeffding tree regressors. In *Brazilian Conference on Intelligent Systems* (pp. 337-351). Springer, Cham.
- 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.

CURRENT GRANTS AND SCHOLARSHIPS

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

SCHOLARSHIPS AND CERTIFICATES

04/2016-03/2018 | CAPES Scholarship for MSc

ACADEMIC INDICATORS

Indexed journal papers: 21
 Conference papers: 15
 Pre-prints: 7

COMPUTER SKILLS

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

OPEN SOURCE

Maintainer and founding member of the River¹ library for Online Machine learning.

¹<https://riverml.xyz>