

Stanford



Everton Jose Santana

Visiting Instructor/Lecturer, Medicine - Cardiovascular Medicine

Bio

BIO

Everton is currently a Visiting Instructor at Stanford University, Division of Cardiovascular Medicine in the School of Medicine.

He has received his BSc degree in Electrical Engineering (2019) and MSc degree in Computer Science (2021) by the State University of Londrina (UEL), Brazil. From 2015 to 2016, he was an exchange student at Hanze University of Applied Sciences, the Netherlands, where he followed minors in Biomedical and Sensor System Engineering.

He has worked with several Research and Development projects, englobing Machine Learning and Instrumentation Engineering applied to many domains.

He has also worked as a Professor at the Pontifical Catholic University of Paraná in the Cyber-Physical Systems theme.

His current research interest is in Data Science applied to Biomedical Signals.

ACADEMIC APPOINTMENTS

- Visiting Instructor/Lecturer, Medicine - Cardiovascular Medicine
- Member (Visiting), Cardiovascular Institute

HONORS AND AWARDS

- 32nd Science and Technology Award of Paraná - Undergraduate in Exact and Earth Sciences Category, General Secretariat for Science, Technology and Higher Education - Government of Paraná State (BR) (2019)
- Master's Scholarship, Brazilian Coordination for the Improvement of Higher Education Personnel (CAPES) (2019-2020)
- Honorable Mention Award - Evaluating the Four-way Performance Trade-off for Stream Classification, 4th International Conference on Green, Pervasive and Cloud Computing (2019)
- PIBIC Undergraduate Research Scholarship, Brazilian Council for Scientific and Technological Development (CNPq) (2017-2018)
- Science without Borders Undergraduate Exchange Scholarship, Brazilian Council for Scientific and Technological Development (CNPq) (2015-2016)
- PICME Undergraduate Research Scholarship, Brazilian Council for Scientific and Technological Development (CNPq) (2013-2015)
- Silver Medal in the Brazilian Mathematics Olympiad for Public Schools, Brazilian Pure and Applied Math Association, Ministry of Education, Science and Technology et al. (2009)
- Honors in the Brazilian Mathematics Olympiad for Public Schools, Brazilian Pure and Applied Math Association, Ministry of Education, Science and Technology et al. (2007, 2012)

PROFESSIONAL EDUCATION

- Master, State University of Londrina , Computer Science (Computational Intelligence) (2021)
- Bachelor, State University of Londrina , Electrical Engineering (2019)
- Minor (Exchange), Hanze Institute of Technology , Sensor Systems Engineering (2016)
- Minor (Exchange), Hanze University of Applied Sciences , Biomedical Engineering (2015)

LINKS

- Google Scholar: <https://scholar.google.com.br/citations?user=0sk55lwAAAAJ>
- ResearchGate: <https://www.researchgate.net/profile/Everton-Santana-2>

Publications

PUBLICATIONS

- **Clinical and biochemical predictors of longitudinal changes in left atrial structure and function: A general population study.** *Echocardiography (Mount Kisco, N.Y.)*
Kuznetsova, T., Daels, Y., Ntalianis, E., Santana, E. J., Sabovčík, F., Haddad, F., Cauwenberghs, N.
2024; 41 (2): e15780
- **Improving Reporting of Exercise Capacity Across Age Ranges Using Novel Workload Reference Equations.** *The American journal of cardiology*
Santana, E. J., Christle, J. W., Cauwenberghs, N., Peterman, J. E., Busque, V., Gomes, B., Bagherzadeh, S. P., Moneghetti, K., Kuznetsova, T., Wheeler, M., Ashley, E., Harber, M. P., Arena, et al
2024
- **Right Ventricular Dysfunction Patterns Among Patients with COVID-19 in the Intensive Care Unit - a Retrospective Cohort Analysis.** *Annals of the American Thoracic Society*
Sanchez, P. A., O'Donnell, C. T., Francisco, N., Santana, E. J., Moore, A. R., Pacheco-Navarro, A., Roque, J., Lebold, K. M., Parmer, C. M., Pienkos, S. M., Celestin, B. E., Levitt, J. E., Collins, et al
2023
- **Multiple voice disorders in the same individual: Investigating handcrafted features, multi-label classification algorithms, and base-learners** *SPEECH COMMUNICATION*
Barbon Junior, S., Guido, R., Aguiar, G., Santana, E., Proenca Junior, M., Patil, H. A.
2023; 152
- **Novel left ventricular mechanical index in pulmonary arterial hypertension.** *Pulmonary circulation*
Ichimura, K., Santana, E. J., Kuznetsova, T., Cauwenberghs, N., Sabovčík, F., Chun, L., Francisco, N. L., Kheyfets, V. O., Salerno, M., Zamanian, R. T., Spiekerkoetter, E., Haddad, F.
2023; 13 (2): e12216
- **Challenging obesity and sex based differences in resting energy expenditure using allometric modeling, a sub-study of the DIETFITS clinical trial.** *Clinical nutrition ESPEN*
Haddad, F., Li, X., Perelman, D., Santana, E. J., Kuznetsova, T., Cauwenberghs, N., Busque, V., Contrepois, K., Snyder, M. P., Leonard, M. B., Gardner, C.
2023; 53: 43-52
- **Feature-based clustering of the left ventricular strain curve for cardiovascular risk stratification in the general population.** *Frontiers in cardiovascular medicine*
Ntalianis, E., Cauwenberghs, N., Sabovčík, F., Santana, E., Haddad, F., Claus, P., Kuznetsova, T.
2023; 10: 1263301
- **Using meta-learning for multi-target regression** *INFORMATION SCIENCES*
Aguiar, G. J., Santana, E. J., de Carvalho, A. L., Barbon Junior, S.
2022; 584: 665-684
- **Detecting and Mitigating Adversarial Examples in Regression Tasks: A Photovoltaic Power Generation Forecasting Case Study** *INFORMATION*
Santana, E., Silva, R., Zarpelao, B., Barbon Junior, S.
2021; 12 (10)
- **Improved prediction of soil properties with multi-target stacked generalisation on EDXRF spectra** *CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS*
Santana, E., dos Santos, F., Mastelini, S., Melquiades, F., Barbon Jr, S.
2021; 209
- **Evaluating the Four-Way Performance Trade-Off for Data Stream Classification in Edge Computing** *IEEE TRANSACTIONS ON NETWORK AND SERVICE MANAGEMENT*

Lopes, J., Santana, E., Turrisi da Costa, V. G., Zarpelao, B., Barbon Junior, S.
2020; 17 (2): 1013-1025

- **DSTARS: A multi-target deep structure for tracking asynchronous regressor stacking** *APPLIED SOFT COMPUTING*
Mastelini, S., Santana, E., Cerri, R., Barbon Jr, S.
2020; 91

- **Photovoltaic Generation Forecast: Model Training and Adversarial Attack Aspects**
Santana, E. J., Silva, R. P., Zarpelão, B. B., Barbon Jr., S.
2020: 634-649

- **Advantages of Multi-Target Modelling for Spectral Regression** *Spectroscopic Techniques & Artificial Intelligence for Food and Beverage Analysis*
Barbon Jr., S., Santana, E. J., Badaró, A. T., Borrás, N. A., Barbin, D. F.
edited by Shukla, A. K.
Springer Singapore.2020: 95-121

- **Multi-Output Tree Chaining: An Interpretative Modelling and Lightweight Multi-Target Approach** *JOURNAL OF SIGNAL PROCESSING SYSTEMS FOR SIGNAL IMAGE AND VIDEO TECHNOLOGY*
Mastelini, S., Turrisi da Costa, V., Santana, E., Nakano, F., Guido, R., Cerri, R., Barbon, S.
2019; 91 (2): 191-215

- **Towards Meta-Learning for Multi-Target Regression Problems**
Aguiar, G. J., Santana, E. J., Mastelini, S. M., Mantovani, R. G., Barbon Jr., S.
2019: 337-382

- **Evaluating the Four-Way Performance Trade-Off for Stream Classification**
Turrisi da Costa, V. G., Santana, E., Lopes, J. F., Barbon, S., Miani, R., Camargos, L., Zarpelao, B., Rosas, E., Pasquini, R.
SPRINGER INTERNATIONAL PUBLISHING AG.2019: 3-17

- **Predicting poultry meat characteristics using an enhanced multi-target regression method** *BIOSYSTEMS ENGINEERING*
Santana, E. J., Geronimo, B. C., Mastelini, S. M., Carvalho, R. H., Barbin, D. F., Ida, E. I., Barbon, S.
2018; 171: 193-204

- **Benchmarking multi-target regression methods**
Mastelini, S., Santana, E., Turrisi da Costa, V. G., Barbon, S., IEEE
IEEE.2018: 396-401

- **Stock Portfolio Prediction by Multi-Target Decision Support**
Provin Ribeiro da Silva, J., Santana, E., Mastelini, S., Barbon, S., ACM
ASSOC COMPUTING MACHINERY.2018: 262-269

- **DSTARS: A Multi-Target Deep Structure for Tracking Asynchronous Regressor Stack**
Mastelini, S., Santana, E., Cerri, R., Barbon, S., IEEE
IEEE COMPUTER SOC.2017: 19-24