Bruna Zamith Santos

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Main Areas of Interest

• Data Science, Machine Learning, Research & Development, Software Engineering

Professional Experience

Software Development Intern

• Amazon Sao Paulo, SP - Brazil Data Scientist II Mar. 2022 – Present

o Developing Machine Learning models to improve operations, profitability and customer experience for Amazon LatAm. Technologies: AWS, Python, SQL

Sao Paulo, SP - Brazil Amazon Software Development Engineer II Dec. 2021 - Feb. 2022 Software Development Engineer I Jul. 2020 - Nov. 2021

o Worked with both front and backend development. Modelled large scale applications, integrated with Amazon's core internal systems to improve the seller and buyer experiences. Technologies: AWS, Java, Python, NodeJs

• Serasa Experian Sao Carlos, SP - Brazil MIS Intern Aug. 2019 - Dec. 2019

o MIS (Management Information Systems) Intern. Worked with databases and on the construction of dashboards, in alignment with the needs of the Finance Department. Technologies: SQL, SAS, Tableau

Research Experience

Masters Candidate

BioMaL - Bioinformatics and Machine Learning Group

Sao Carlos, SP - Brazil Aug. 2021 - Present

Scientific Initiation Scholar

Mar. 2015 - Sep. 2020

Jan. 2020 - Jul. 2020

- o Project team leader in the development of three scientific researches. Two of them funded by Sao Paulo Research Foundation (FAPESP) and National Council for Scientific and Technological Development (CNPq). Worked with different machine learning algorithms and datasets. Resulted in the publication of 5 papers. Technologies: Python, R
- o As a Master Candidate, working in the project entitled "Climate Variables Forecasting and Forest Fire Risk Rate Classification in the Brazilian Pantanal", which is supported by Brazilian Agricultural Research Corporation (Embrapa). Technologies: Python
- Katholieke Universiteit Leuven (KU Leuven)

Research Intern

Kortrijk, Flanders - Belgium Sep. 2017 - Dec. 2017

 Scientific research "Predicting Protein Functions via Interaction Prediction". Funded by Sao Paulo Research Foundation (FAPESP). The main purpose was to model the protein function prediction task as a Hierarchical Multi-label Classification (HMC) problem through interaction data. Technologies: Java

EDUCATION

• Federal University of Sao Carlos (UFSCar)

Masters in Artificial Intelligence

Sao Carlos, SP - Brazil Aug. 2021 - Present

o **GPA:** 10/10

• Federal University of Sao Carlos (UFSCar)

Bachelor in Computer Engineering

Sao Carlos, SP - Brazil Mar. 2015 - Jul. 2020

o **GPA:** 8.75/10

Programming Skills

Languages: Python (5 years); Java (5 years); R (2 years); SQL (2 years); C++ (6 months)

• Others: AWS, Git, Linux, Latex

Language

• Portuguese: Native

• English: Fluent (Cambridge English Certificate ESOL Intl)

PRESENTATIONS, PROCEEDINGS, AND PAPERS

- "A New Time Series Framework for Forest Fire Risk Forecasting and Classification" Zamith B., Soriano, B., Narciso, M., Furtado, D., Cerri R. (2023). International Joint Conference on Neural Networks (IJCNN).
- "Predictive Bi-Clustering Trees for Hierachical Multi-label Classification" Zamith B., Nakano, K. F., Cerri R., Vens C. (2020). European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD).
- "Strategies for Selection of Positive and Negative Instances in the Hierarchical Classification of Transposable Elements" Zamith B., Pereira, T. G., Nakano, K. F., Cerri R. (2018). Brazilian Conference on Intelligent Systems (BRACIS).
- "A Genetic Algorithm for Transposable Elements Hierarchical Classification Rule Induction" Pereira, T. G., Zamith B., Cerri R. (2018). IEEE Congress on Evolutionary Computation (IEEE CEC).
- "A New Machine Learning Dataset for Hierarchical Classification of Transposable Elements" Zamith B., Cerri R. (2016). National Meeting of Artificial and Computational Intelligence (ENIAC).
- "Decisions Trees for Hierarchical Classification of Transposable Elements" Zamith B., Gomes Mantovani R., Schietgat L., Vens C., Cerri R. (2016). Proceedings of the 25th Belgian-Dutch Machine Learning Conference (Benelearn).

CERTIFICATIONS

- Sequence Models (2022): 38 hours online course provided by DeepLearning.ai.
- Sequences, Time Series and Prediction (2022): 23 hours online course provided by DeepLearning.ai.
- Introduction to AWS (2020): 5 hours online course provided by A Cloud Guru.
- Version Control With Git (2019): 12 hours online course provided by Atlassian.
- Software Development Processes and Methodologies (2019): 18 hours online course provided by University of Minnesota.

OTHER PROJECTS

- School of AI Health Hackathon (2019): Team project aimed to develop an app which seeks to reduce patients waiting time (at hospitals queue). The patient types what he is feeling and then via Natural Language Processing the symptoms are classified into a medical specialty.
- Intel IoT Roadshow (2015): Team project aimed to develop a "smart" bathroom making use of relevant capacity utilization data, and trigger "on demand" cleaning process alert, which leads to resources use optimization.