Julissa **Villanueva**

FORMATION

2023 PhD. in Computer Science, University of São Paulo, São Paulo-Brazil.

2017 Master in Computer Science, University of São Paulo, São Paulo-Brazil.

2013 Bachelor in Systems Engineering, National University of San Agustin, Arequipa-Peru.

</> Skills

Programming Python, C/C++, R, Java, Julia, Ruby, Cobol, VisualBasic.

Libraries Numpy, Pandas, Scikit-learn, HuggingFace, Pytorch, Scipy, Seaborn, Matplotlib, Orange, QML,

Django (Backend), GPT-API, Langchain, Chromadb, FAISS.

Databases MySQL, PostgreSQL.

Miscellaneous Git, LTFX, Shell, Pack Office(Word, Excel, PowerPoint).

EXPERIENCE

Ago 2023 | Machine Learning Developer, FREELANCE,

Sep 2023

Legal documents review with GPT API.

- > Data analysis.
- > Question answering with Embeddings.
- > Text generation with GPT 3.5

Python OpenAl GPT3.5 Langchain Chromadb

Nov 2022 | Data Scien

Data Scientist - Technological and Industrial Development (B), TelessaúdeRS,

Jul 2023

Development of Natural language Processing system (Classification of clinical cases).

- > Data visualization.
- > Data analysis.
- > Deep Transformer models (BERT).
- > Measuring predictive uncertainty.

Python HuggingFace PyTorch Sklearn Pandas Seaborn

Dec 2020

Teacher, DATA SCIENCE RESEARCH PERÚ,

May 2022

Teaching online courses:

- > Introduction to Python.
- > Introduction to Statistics.
- > Machine learning.
- > Mathematics for Machine Learning.

Python

March 2018

Teaching Assistant, UNIVERSITY OF SÃO PAULO,

July 2020

Teaching Assistant on undergraduate courses:

- > Artificial Intelligence,.
- > Programming Languages.
- > Introduction to Computer Science.

Python

March 2014

Trainee, TATA Consultancy Services, Arequipa-Peru,

May 2015

Development and testing of bank systems.

COBOL VisualBasic

Course Work

- > Artificial Intelligence
- > Machine Learning
- > Statistical Learning

- > Probabilistic Models based on Graphs
- > Database Modeling
- > Master Thesis: Multi-Label classification based on sum-product networks
- > PhD. Dissertation: Global qualitative analysis for probabilistic circuits





♣ INTERESTS

- > Artificial Intelligence
- > Machine Learning and applications
- > Statistics

PUBLICATIONS

- Tractable classification with non-ignorable missing data using Generative Random Forests, J.V. Llerena and D. D. Mauá, in Proceedings of the Tenth Symposium on Knowledge Discovery, Mining and Learning.
- 2021 Cautious Classification with Data Missing Not at Random using Generative Random Forests, J.V. Llerena, D. D. Mauá and A. Antonucci, in Proceedings of the Sixteenth European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty.
- 2020 Efficient Algorithms for Robustness Analysis of Maximum A Posteriori Inference in Selective Sum-Product Networks, J.V. Llerena and D.D. Mauá, in: International Journal of Approximate Reasoning.
- Tractable inference in credal sentential decision diagrams, L. Mattei, A. Antonucci, D.D. Mauá, A. Facchini, J.V. Llerena, in: International Journal of Approximate Reasoning
- 2020 **Predictive Uncertainty Estimation for Tractable Deep Probabilistic Models**, J.V. Llerena, in: Proceedings of the Doctoral Consortium of the 29th International Joint Conference on Artificial Intelligence.
- 2020 **Efficient Predictive Uncertainty Estimators for Deep Probabilistic Models**, J.V. Llerena and D.D. Mauá, in : Proceedings of the Doctoral Consortium of the 24th AAAI Conference on Artificial Intelligence.
- 2019 **Robust Analysis of MAP Inference in Selective Sum-Product Networks**, J.V. Llerena, D.D. Mauá, in: Proceedings of the 20th International Symposium on Imprecise Probabilities: Theories and Application
- 2017 On using sum-product networks for multi-label classification, J.V. Llerena and D.D. Mauá, in: Proceedings of the 6th Brazilian Conference on Intelligent.

Awards and funding

2022-2023	CNPQ Scholarship for Technological and Industrial Development (B)
2017-2022	CAPES Scholarship for PhD. in Computer Science at University of São Paulo
0045 0045	

2015-2017 CAPES Scholarship for Master in Computer Science at University of São Paulo