Vinícius de Paulo Souza Ribeiro

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ACADEMIC EDUCATION

Doctor of Philosophy (Ph.D.) – Université de Lorraine   Oct 2020 – Dec 2023

Computer Science – Deep Learning, Speech Production

Thesis title: *Deep supervision of the vocal tract shape for articulatory synthesis of speech*

Extra-curricular activities:

- 12th Lisbon Machine Learning School – Instituto Superior Técnico, Lisboa, Portugal (July 2022)

- 4th International School on Deep Learning – Università Politecnica delle Marche, Universitat Rovira i Virgili & IRDTA, Las Palmas de Gran Canaria, Spain (July 2021)

Master of Science – University of Campinas   Aug 2017 – Aug 2019

Electrical Engineering – Deep Learning, Computer Vision

Dissertation title: *The Impact of Annotation Quality on Deep Learning for Skin Lesion Segmentation*

Extra-curricular activities:

- Summer School on Data Science for Document Analysis and Understanding – La Rochelle Université & Inria, France (July 2019)

Bachelor of Science – University of Campinas   Feb 2011 – Aug 2016

Electrical Engineering

Extra-curricular activities:

- Software Engineering Internship – Motorola Mobility, Jaguariúna, Brazil (2015 – 2016)

- Linear Analysis Lab Teaching Assistant – University of Campinas, Campinas, Brazil (1S2015)

- Academic Internship – Czech Technical University, Prague, Czech Republic (Jan – Feb 2015)

- Academic Internship – University of Campinas, Campinas, Brazil – Funded by PIBITI/CNPq (2014 – 2015)

PUBLICATIONS

I have publications in international conferences, such as CVPR, Interspeech and ICA, and journals, such as Speech Communication, as well as pre-print work available online. For a my list of publications, visit my Google Scholar profile or my personal website.

LANGUAGES

Portuguese	Native
English	Fluent
French	Advanced

TECHNICAL SKILLS

Programming	Python
Machine Learning	PyTorch, Scikit-Learn, Numpy, others
Cloud Computing	Amazon Web Services, Google Cloud Platform
Databases	SQL, NoSQL, Graph DBs

PROFESSIONAL EXPERIENCES

Loria   Oct 2020 – Dec 2023
Doctoral Researcher   *Nancy, France*

· PhD Candidate at the Multispeech research team at Loria, under the supervision of Yves Laprie. My research is focused on machine learning methods for articulatory synthesis of speech.

Meta AI   Aug 2022 – Dec 2022
Research Scientist Intern   *New York, USA*

· At the AI Speech Team, I explored wake word detection and different phonetic alignment approaches for these models. I compared alignment-based and alignment-free, and proposed a hybrid alignment, that mixes the two. My experiments showed alignment-free training outperforms alingment-based for lower FAh levels, while the opposite happens on higher FAh levels. Moreover, when trained with the correct aligned-to-unaligned ratio, the proposed hybrid system obtains the best of the two worlds.

Dasa & Nexa Digital   Oct 2018 – Oct 2020
Data Science Specialist   *São Paulo, Brazil*

· At Nexa Digital (acquired by DASA), I worked as a data scientist in the processing of medical documents using traditional ML and DL models (LSTM, CNN, attention mechanisms). Apart from traditional data science, my work included developing data infrastructure, building high-performance systems and pipelines.
· After the M&A, I worked on processing medical images (MRI, X-ray, ultrasound) using deep convolutional networks. Our goal was to improve the clinical daily tasks and patients' well being with artificial intelligence.

iFood & Rapiddo Delivery   Nov 2017 – Oct 2018
Data Science & Analytics   *São Paulo, Brazil*

· At Rapiddo Delivery (acquired by iFood), I worked as a data scientist in the food delivery business. My most significant contribution was the development of a dynamic pricing system based on the supply and demand at any time. As a result, the system enabled a positive margin in the largest city that we operated for the first time.
· After the M&A, I worked as a data scientist in the logistics team. I also led and launched our mPOS system, one of our most strategic projects in that year. I was responsible for dealing with suppliers, the tech team, and other stakeholders. As a result, I was the main responsible for increasing our demand by 30% in all cities we launched.

Eldorado Research Institute   May 2016 – Nov 2017
Junior Software Engineer   *Campinas, Brazil*

· At Eldorado, I worked at an international project for Motorola Mobility. We were responsible for developing software automation tools to help the engineering teams to be more productive. As a software engineer, I worked mainly with Python at a team with people from the US, Brazil, and India.