

LUIZ GUILHERME KASPUTIS ZANINI

Brazilian and Lithuanian Citizen

✉ luiz.zanini5@gmail.com  [lgzanini.github.io](https://github.com/lgzanini)  [Luiz Zanini](#)  [LGKZanini](#)

Education

École de Technologie Supérieure (ÉTS)

Montreal, QC, Canada

Ph.D. in Engineering, specializing in Multimodal Machine Learning

Sep. 2024 – Ongoing

- Focus on affective computing applications, including video, physiological signals, and other modalities.

University of São Paulo

São Paulo, SP, Brazil

M.Sc. in Electrical and Computer Engineering

Feb. 2022 – Jul. 2024

- **Thesis:** Segmentation and Classification of Dental Caries in Computer Tomography.
- **Fellowship:** *Programa de Bolsas Itaú* (PBI).
- **Coursework:** Artificial Intelligence, Machine Learning, Computer Vision, Data Science, Virtual Reality.

University of São Paulo

São Paulo, SP, Brazil

B.Sc. in Computer Engineering

Mar. 2018 – Dec. 2022

- **Coursework:** Software Quality, AI & Machine Learning, High-Performance Computing.
- **Award:** Best Final Paper of the Computer Engineering Poli - USP 2022.

Experience

C2D - Machine Learning Researcher

São Paulo, SP, Brazil

Full-time Researcher in Computer Vision for Healthcare Applications

Jan. 2022 – Aug. 2024

- Published 5+ first-author papers on deep learning in collaboration with multidisciplinary teams.
- Developed an automated pipeline for processing, prediction, and 3D visualization in healthcare applications.
- Developed machine learning pipelines, achieving a 7% accuracy improvement over traditional methods.

Ada Tech

São Paulo, SP, Brazil

Data Scientist Junior

Sep. 2021 – Jan. 2022

- Built ETL pipelines with AWS services (Lambda, SQS, S3) to automate data ingestion and transformation processes.
- Developed predictive models in collaboration with the marketing team, increasing lead conversion rates by up to 10%.
- Created dashboards in Amazon QuickSight to support data-driven decisions.

Stefanini Scala

São Paulo, SP, Brazil

Data Scientist Intern

Jan. 2021 – Aug. 2021

- Developed optimization solutions with genetic algorithms, reducing costs by 15% and maintaining product quality.
- Utilized Apache Spark for distributed data processing, improving performance on large-scale datasets.

Taqtile

São Paulo, SP, Brazil

Software Development Intern

May. 2020 – Dec. 2020

- Developed mobile applications with React Native and Apollo GraphQL, reducing app load times.
- Collaborated in an agile team, ensuring code quality through peer reviews.

Selected Publications

Enhancing Dental Caries Classification by using Image Processing and Self-Supervised Learning

[Luiz Zanini](#), Fátima Nunes, and Izabel Rubira-Bullen - Journal Computers in Biology and Medicine, 2024.

Segmentation and Classification in Computer Tomography using Machine Learning and Image Processing

[Luiz Zanini](#), Fátima Nunes, and Izabel Rubira-Bullen - HEALTHINF 2024, Rome, Italy.

Convolutional architectures with LSTM and TCN: exploring dependency between data

[Luiz Zanini](#), Aldomar Silva, Felipe Almeida, Fátima Nunes, and Anna Costa - ENIAC 2022, Brazil.

- **Award:** Second place for best paper in the undergraduate category.

Skills & Other

Technologies: Machine Learning, Deep Learning (PyTorch), OpenCV, AWS, MySQL, Git, Bash, Unix.

Programming Languages: JavaScript, Python, C, C++, LaTeX.

Reviewer: NeurIPS 2024 (LXAI), Journal of Information Fusion.

Certifications: [AWS Certified Cloud Practitioner](#) (Jun 2022), [AI for Medicine](#) (Feb 2022), [Deep Learning Specialization](#) (Jun 2021).

Languages: Portuguese (Native), English (C1).