

Education

- 2019-2023 **PhD in Computer Science**, *University of Campinas (UNICAMP)*, Brazil, 4/4 GPA.
- 2017-2019 **MS in Computer Science**, *University of Campinas (UNICAMP)*, Brazil, 4/4 GPA.
- 2012-2016 **Bachelor in Computer and Systems Engineering**, *Universidad Nacional de San Antonio Abad del Cusco (UNSAAC)*, Perú, 2nd place of all students in class for the last 3 years.

Awards and Recognitions

- **Microsoft**: 2023, Patent: "MLHash: De-identification designed for Machine Learning"
- **Microsoft Fall Hackathon**: 2021, Best Project Award; Most Innovative Project Runner-Up.
- **International Conference on Information and Knowledge Management (CIKM)**: 2020, Best Paper Award
- **UNICAMP**: 2017;2019, Brazilian National Council for Scientific and Technological Development Scholarship.
- **ACM International Collegiate Programming Contest (ICPC)**: 2015, 6th in all Peru; 2014, 1st in the South of Perú; 2013, top 13% participants in the South Region of Latin America.
- **UNSAAC**: 2014, Winner of the Technology Fair UNSAAC, with a project using PIC 16F84A; 2013, Winner of the Cusco Programming Contest "Cuscontest"; 2012, Achieved 2nd in the Joint Entrance Examination.
- **Colombian Competitive Programming Network**: 2015, Winner of PI-DAY programming contest.

Languages, Technologies and Courses

- C, C++, Python, Java, PHP, C#, Transformers, OpenCV, Scikit-Learn, Scikit-Image, PyTorch, TensorFlow.
- Visual Studio, SQL, OpenMP, Docker, CUDA, Linux, ONNX.
- Software Engineering, Concurrent & Parallel Programming, Machine/Deep Learning, Natural Language Processing (NLP), Information Retrieval, Computer Vision, Search, Recommendations.

Projects and Experience

2022-Present **MICROSOFT – APPLIED SCIENTIST II.**

- Leading project for Name Entity Recognition (NER), applied for Personal Health Information (PHI) tagging.
- Developed methods for lossless surrogation applied to PHI Deidentification.
- Developed models to improve privacy handling for PHI for text summarization using Differential Privacy.

2020-2022 **MICROSOFT – SOFTWARE DEVELOPMENT ENGINEER.**

- Lead incubation project including cross teams colaboration, backend development, products recommendations and NLP for receipt expansion and understanding.
- Contributor to major open source project for NLP and Deep Learning: [huggingface/transformers](https://huggingface.co/transformers)
- Implemented supervised and self-supervised NLP pipelines. Models deployed in production improved Revenue by 5%, Click-through Rate by 14% and Abandonment by 19% in Bing Shopping Vertical.

2018-2023 **UNICAMP – COMPUTER VISION FOR OBJECT REIDENTIFICATION AND TRACKING.**

- Proposed method for adaptive use of Reidentification(ReID) information on Multi-Object Tracking in videos. Improve State-Of-the-Art (SOTA) F1 MOT by 2%.
- Proposed efficient distillation of multi-modal information for ReID in images. Improved SOTA rank-1 by 4.5%.
- Proposed supervision method to leverage low informative image regions in ReID representation. Improved SOTA rank-1 by 4.7%.

2018 **MICROSOFT – SOFTWARE DEVELOPMENT ENGINEER INTERN.**

- Developed NLP models for Conversational Search in Bing to narrow users intention. Features released to production.

Positions of Responsibility and Extra-Curricular Activities

2021 **Peruvian Symposium in Deep Learning.** Speaker and Menthor

2017 – 2018 Problem setter in competitive programming contest in Cusco: "Cuscontest"; Peru: "Peruvian Scholar Contest"; LATAM: "IEEE International Congress on Electronics, Electrical Engineering and Computing"

2013 – 2015 **Programming Training Camps**

Peruvian training Camp (2013 - 2015, topped 5 in all contest), Bolivian training Camp (2014, topped 2 in all contest)