

Jose Esparza

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Summary

I am a Bachelor of Software Engineering, broadly interested in Machine Learning and its theoretical foundation. At the time, my scientific work is based on the review and application of algorithms in complex operations, just as reviewing the use of Convolutional Neural Networks in respiratory conditions detection, and using Natural Language Processing algorithms for the analysis of Twitter data. I am actively searching research and industry experience to enhance my path as a machine learning professional.

Education

- **Summer School Attendant**
Skolkovo Institute of Science and Technology
Moscow — Russia, August 2020
- **Bachelor of Software Engineering**
GPA: 4.0
Leader of the FOSS Community between 2019 and 2020. [Highlighted student](#).
Universidad Privada del Norte
Trujillo — Perú, March 2016 - December 2020

Research interests

- Machine Learning and Deep Learning
- Algorithm analysis and optimization
- Computational learning theory

Languages

- **Spanish** — Native
- **English** — CEFR C2 Proficient (74/100)
[Certificate](#)

Scientific production and projects

- **Understanding the Issues Surrounding COVID-19 Vaccine Roll Out Via User Tweets**
The 10th International Conference on Computational Data and Social Networks — Conference paper
December 04, 2021 — **doi:** 10.1007/978-3-030-91434-9_18
- **Convolutional Neural Networks in Respiratory Conditions Detection: A Systematic Review of the Last 4 Years**
Summer School of Machine Learning at Skoltech — Research poster
August 16, 2020 — [Source](#)
- **SkinCareAI: A mobile application for skin affection detection**
Universidad Privada del Norte — Final course project
March, 2020 — July, 2020
Technologies: Python, PyTorch, Android, Firebase
- **Braille reader for blind education using computer vision techniques**
Universidad Privada del Norte — Final course project
October, 2018 — December, 2018
Technologies: Python, OpenCV, Tensorflow, Raspberry Pi

Professional experience

- **The New England Center for Children**

Non-profit education organization

Software Engineer March 2023 — Present

- **Teamcore**

Retail-oriented AI application

ETL Lead July 2022 — January 2023

Worked organizing, developing and maintaining the ETL processes of the company using Python, AWS, GCP, Jenkins and Jira.

- **Apurata**

Fast and secure credit peruvian fintech

Backend developer & Data Scientist December 2021 — June 2022

Worked developing and maintaining the backend system (Apurata and aCuotaz) using Python, MongoDB and AWS; and creating credit scoring models for good payer detection and some visualizations using Jupyter, scikit-learn and Metabase.

- **Boroo Gold**

International mining company.

Freelance Backend Developer October 2021 — April 2022

Worked developing and maintaining the health and insurance document management system using Python, Typescript and MSSQL.

- **Binghamton University**

Public research university.

Research Intern January 2021 — August 2021

Worked on the analysis of large group of text corpora related to COVID-19 using NLP approaches: Term Frequency and Sentiment Analysis using Transformers on Python, and Topic Discovery with LDA and SeededLDA implemented on C++.

- **Barrick Gold Corporation**

International mining company.

Temporal IT Analyst May 2021 — July 2021

Worked realizing and supporting the internal network analysis and migration from Barrick Gold Corporation to Boroo Gold using Windows Server, RHEL and Python.

- **Freelance**

Freelance developer.

Freelance Backend Developer January 2020 — April 2021

Worked on the development of a web application for the management of a small business (technology business mostly) using Python, ReactJS and MySQL.

- **Everis**

Consulting and outsourcing company.

HPC Semi-Senior Developer February 2020 — December 2020

- **INDITEX:** Worked on microservices project for raw material management platform using company tech stack: Spring, RHEL, PostgreSQL, SonarQube and Jenkins.
- **Ministerio de Justicia (España):** Worked on decease and inheritance certificates system refactoring and reimplementation using Spring, WildFly, RHEL, OracleDB SonarQube and Jenkins.

- **DAVOS SALUD**

Healthcare company.

Freelance Backend Developer June 2019 — December 2019

Worked on the development of a web application for the management of medical records using Python, MySQL and Typescript. Also trained a fastText model to classify emotions from social network reviews.

- **T-Soluciona**

Third-party company.

Software Engineering Intern January 2019 — May 2019

Worked on the development of a payroll management system using Delphi, Python, MySQL and PHP. Also being in charge of the query and math formulas optimization.

Skills

- **Programming languages:** C, C++, Java, Python, R, Julia, Bash, MATLAB, SQL
- **Operating Systems:** Windows, GNU/Linux
- **Databases:** MSSQL, MySQL, PostgreSQL, OracleDB, MongoDB
- **Tools and frameworks:** Vim, Git, L^AT_EX, Metabase, Tensorflow, PyTorch, Keras, NumPy, Pandas, NLTK, scikit-learn, Flux.jl
- **Cloud technologies:**
 - **Amazon Web Services:** S3, EC2, Athena, Lambda DynamoDB, CloudWatch
 - **Google Cloud Platform:** Looker, BigQuery, Cloud Run, Cloud Storage, Cloud Functions

Volunteering, honors and awards

- **WHO COVID-19 Research Database Indexed**

World Health Organization — August 2022

My research paper *Understanding the Issues Surrounding COVID-19 Vaccine Roll Out Via User Tweets* was indexed in the WHO COVID-19 Research Database.

- **REPU Alumni**

Research Experience for Peruvian Undergraduates — October 2020

I was one of the selected undergraduate students to be part of the REPU Computer Science 2021 program, mentored by Gisella Bejarano and being part of the laboratory lead by professor Arti Ramesh at Binghamton University.

- **Top 10% Spot, SMILES 2020**

Skolkovo Institute of Science and Technology — August 2020

I got an exclusive spot (top 10% of 2000+ applicants) to present my work: *Convolutional Neural Networks in Respiratory Conditions Detection: A Systematic Review of the Last 4 Years*.

- **Conference Organizer**

FLISoL — April 2019

Flisol Perú organizer, a conference about FOSS and community free knowledge. Trujillo, La Libertad — Perú.

Courses

- **R Bootcamp**
Data Science Research Perú
March 2023
- **Scrum Foundation Professional Certificate SFPC™**
CertiProf
February 2023 - Certificate ID 83527332
- **Deep Learning with Flux.jl**
JuliaAcademy
February 2023 — Certificate No. cert_my5hq86p
- **Julia for Data Science**
JuliaAcademy
February 2023 — Certificate No. cert_7d16st8h
- **Data Analytics for Ingestion and Validation**
Google Cloud Labs (sponsored by Teamcore)
December 2022
- **Introduction to Computational Thinking**
Massachusetts Institute of Technology
February 2021
- **Probabilistic Graphical Models**
Stanford University
January 2021
- **Summer School of Machine Learning**
Skolkovo Institute of Science and Technology
August 2020 — [Certificate](#)
- **Deep Learning Specialization**
deeplearning.ai
September 2020 — [Certificate](#)
- **Big Data and Machine Learning**
Universidad Privada del Norte
March 2020
- **Machine Learning**
Stanford University
November 2019 — [Certificate](#)
- **Creation of a Professional Trajectory in Digital Security**
Organization of American States (OAS)
May 2019 — [Certificate](#)

References

- **Martín David Llaue Santos**
Technical Product Owner at Teamcore
davidllauesantos@gmail.com
- **Jose Enrique Carrillo Pino**
Chief Technology Officer at Apurata
jose@apurata.com
- **Arti Ramesh**
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- **Gissella Bejarano**
Teaching assistant at Binghamton University
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- **Rolando Javier Berru Beltran**
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- **Victor Dávila Rodriguez**
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