Jose Esparza

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Summary

I'm a Software Engineer with extensive knowledge about Machine Learning, Data Science and Developing. My experience in both academics and industry makes me aware of novelty and fast driving, as well as good analytical skills. I worked with multi-national teams, mostly speaking the English language, giving me an integral communication fluency. My work is related with complex systems using large data pipelines, as well as performing analysis and applying machine learning models.

Research interests

- Machine Learning and Deep Learning
- Algorithm analysis and optimization
- Applied Machine Learning

Education

- Master of Science in Computer Science
 University of London
 London United Kingdom September 2022 Present
 - London United Kingdom, September 2023 Present
- 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

Languages

- Spanish Native
- English CEFR C2 Proficient (74/100) Certificate

Scientific production and projects

- Empowering Julia-based Data Science with MLflow Google Summer of Code — Open-source project
 May 2023 — September 2023 - Source
- 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 Autism Education and Research

Senior Software Engineer March 2023 — Present

• Google Summer of Code Open-source program

Contributor May 2023 — September 2023

Integrating MLflow into the MLJ ecosystem, allowing communication with multiple framework modules.

• 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

Software Engineer December 2021 — June 2022

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

• 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 refactorization and reimplementation using Spring, WildFly, RHEL, OracleDB SonarQube and Jenkins.

• Freelance Software Development

- Boroo Gold October 2021 April 2022: Worked developing and maintaining the health and issurance document management system using Python, Typescript and MSSQL.
- Electronics Store 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.
- DAVOS SALUD 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.

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, LaTeX, 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

• Main Contributor

JuliaAI — February 2023

I'm actively contributing to the organization, ensuring the support of the Machine Learning in Julia project (MLJ.jl).

• 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 — Certificate

• Scrum Foundation Professional Certificate SFPC TM

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

• Summer School of Machine Learning Skolkovo Institute of Science and Technology August 2020 — Certificate

• Deep Learning Specialization

deeplearning.ai

September 2020 — Certificate

• Machine Learning

Standford University

November 2019 — Certificate

• Creation of a Professional Trajectory in Digital Security

Organization of American States (OAS)

May 2019 — Certificate

References

• Martín David Llauce Santos

Technical Product Owner at Teamcore davidllaucesantos@gmail.com

• Jose Enrique Carrillo Pino

Chief Technology Officer at Apurata jose@apurata.com

• Arti Ramesh

Professor at Binghamton University artir@binghamton.edu

• Gissella Bejarano

Teaching assistant at Binghamton University gbejara1@binghamton.edu

• Rolando Javier Berru Beltran

Professor at Universidad Privada del Norte rolando.berru@upn.edu.pe

• Victor Dávila Rodriguez

Software Engineering School Director at Universidad Privada del Norte victor.davila@upn.edu.pe