

LUIS RANDY LOAYZA ARROYO

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PROFESSIONAL SUMMARY

Final-year Economics student at PUCP with specialization in AI and Machine Learning. As Data Science Specialist at DIGEMID (Ministry of Health), I lead the architecture of strategic indicators and operational optimization through ML models. My career spans Deep Learning solutions in healthcare (including MediVoz — INDECOPI-recognized IP — and Radox, a pilot AI diagnostic system), advanced production forecasting systems (Magnus GC Consulting), and AI robotics research (NonHuman Lab). Focused on transforming data into high-impact decision assets and developing AI for global public policy.

EDUCATION

Pontificia Universidad Católica del Perú (PUCP)

B.Sc. Economics — Lima, Peru

- Final year. Comprehensive training in econometrics, causal inference, quantitative methods, and public policy analysis.

PROFESSIONAL EXPERIENCE

Ministry of Health of Peru (MINSA) — DIGEMID

Office of the General Directorate — Lima, Peru

Data Science Specialist

February 2026 – Present

- Conduct data analysis and statistical reporting to support pharmaceutical regulation and national public health policies.
- Develop machine learning and AI models for data-driven decision-making in the oversight of medicines and medical devices.
- Manage and optimize institutional databases ensuring integrity, accessibility, and compliance with regulatory standards.
- Automate operational processes through scripts and intelligent workflows, improving the efficiency of DIGEMID's analytical operations.
- Lead innovation projects aligned with the directorate's digital transformation and data governance strategy.

Magnus GC Consulting

Lima, Peru

CTO & Co-founder

March 2026 – Present

- Lead development of a production forecasting platform for demand, sales, and SKU purchase prediction, using wavelet decomposition and ensemble architectures: DLinear, TCN, LightGBM, XGBoost, and MLP.
- Build AI agents (Atlas) with LangGraph and LangChain (Mistral Devstral API) for automated metric analysis, intelligent dashboard generation, and executive reporting.
- Drive technical architecture, product roadmap, and all engineering decisions for the company's AI solutions.

NonHuman AI Robotics Lab

Lima, Peru

CFO

February 2025 – Present

- Manage investment plans and financing strategies for projects in embodied AI, autonomous robots, and reinforcement learning.
- Design and execute project roadmaps that build confidence among investors and potential strategic partners.

- Evaluate partnerships with external entities for the development of physical AI projects and autonomous robotics research.

EsSalud — Institute for Health Technology Assessment (IETSI)

Directorate of Research and Innovation — Lima, Peru

Innovation Projects Analyst

April 2025 – August 2025

- Led execution and management of AI-based innovation projects for the IETSI Directorate, coordinating multidisciplinary teams to develop data-driven health solutions.
- Co-developed Radox: a pilot research system combining a CNN (ResNet/VGG) with an LLM for automated pneumonia detection and radiology report generation, designed for EsSalud's rural telemedicine network using public chest X-ray datasets.
- Co-developed MediVoz: an AI assistant for real-time transcription and structuring of clinical SOAP notes — formally recognized by INDECOPI (Peru's IP authority) and donated to EsSalud for institutional deployment.
- Built automated data pipelines and intelligent agents to optimize reporting workflows and accelerate research analysis cycles.

Junior Data Analyst

February 2025 – April 2025

- Processed and analyzed millions of clinical records using SQL and Python for operational health research across EsSalud's national network.
- Developed ML models (clustering, prediction, classification) to identify care risks such as patient no-shows and preventable mortality.
- Built institutional dashboards and KPIs in Power BI to support strategic decision-making in research and care services.

Grupo Cavassa (ALLINBUS S.A.C.)

Finance and Business Intelligence Division — Lima, Peru

Junior Finance Analyst — Business Intelligence (BI)

July 2023 – August 2024

- Conducted financial data analysis to optimize cost management and profitability across business units.
- Produced detailed financial reports and interactive Power BI dashboards to support strategic decision-making and KPI monitoring.
- Supported migration of corporate databases to cloud solutions, significantly improving data access and accuracy for financial analysis.
- Executed unit productivity analysis, projections, and operational cost evaluations using business intelligence techniques.

Finance Intern

October 2022 – June 2023

- Assisted in cost and profitability analysis, generating Excel and Power BI reports to identify areas for improvement.
- Performed data quality controls and ensured integrity of information used in financial reports, facilitating cross-referencing with accounting records.
- Collaborated closely with logistics and financial planning teams, optimizing accuracy and efficiency in reporting processes.

VOLUNTEERING & EXTRACURRICULAR ACTIVITIES

Economica PUCP

2021 – 2022

Full Member — Finance Area, Lima, Peru

- Authored financial analysis publications and informational notes for the university economics community.
- Organized and led CV improvement workshops and professional training sessions for faculty students.
- Coordinated dynamic reporting projects, managing teams to produce interactive data-driven reports.

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

IBM AI Engineering — Professional Certificate (Full Scholarship) — IBM / Coursera In Progress
Advanced Deep Learning Specialist — IBM / Coursera (Credly Verified) January 2026
Deep Learning with Keras and TensorFlow — IBM / Coursera January 2026
Introduction to Deep Learning & Neural Networks with Keras — IBM / Coursera December 2025
CFA Level 1 Preparation Program — Prep Securities September 2025
Machine Learning for Investments (Grade: 20/20) — BURSEN — Grupo BVL October 2024
Machine Learning Foundations — AWS Certification 2024
Big Data & Data Science — MicroMasters Program — Massachusetts Institute of Technology (MIT) February 2024

TECHNICAL SKILLS

Programming & Data: Python, SQL, R, Stata, MATLAB

ML & AI: Predictive models, Clustering, CNN, Transformers, PyTorch, Keras, TensorFlow

Forecasting: DLinear, TCN, LightGBM, XGBoost, MLP, Wavelet Decomposition, Prophet

AI Agents: LangGraph, LangChain, Mistral API, GPT-4o, RAG, Fine-tuning

Business Intelligence: Power BI (DAX), Looker Studio, Advanced Excel

Databases: Oracle, PostgreSQL

Statistics & Econometrics: Causal models, Multivariate analysis, Time series, Econometrics

LANGUAGES

Spanish: Native

English: Upper-Intermediate (Idiomas Católica — PUCP Language Center)

REFERENCES

Alfredo Vento Ortiz

Associate Professor, Department of Economics, PUCP | avento@pucp.edu.pe

Specialist in Finance, Investment Projects, and Applied Mathematics.

Gonzalo Cachay Silva

Faculty Member, Graduate School of Business, Centrum PUCP | gcachay@pucp.pe

M.Sc. Logistics Engineering, Université Clermont Ferrand 1 (France)

Daysi Díaz Obregon

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Directorate of Research, Institute for Health Technology Assessment.

Lida Esther Hildebrandt Pinedo

Director General of DIGEMID (Ministry of Health) | lhildebrandt@minsa.gob.pe

Highest authority in the General Directorate of Medicines, Supplies, and Drugs.