# Ricardo Huaman

youtube.com/@rotvieofficial | rotvie@gmail.com | linkedin.com/in/ricardo-jesus-huaman-kemper | github.com/rotvie

#### EDUCATION

#### Universidad Privada Antenor Orrego (UPAO)

Trujillo, Peru

Bachelor in Electronic Engineering Merit: 1st place

Jul. 2017 - Jul. 2022

#### EXPERIENCE

#### Machine Learning Engineer

Oct 2025 – Present

Banco de Crédito del Perú (BCP)

Lima, Peru

 Develop and maintain end-to-end Machine Learning pipelines to support internal banking systems and production workloads.

### Artificial Intelligence Engineer

May 2024 – Sep 2025

IP Noticias LATAM

Lima, Peru

- Led business requirement collection and technically guided a team of 2 engineers in implementing solutions, including strategic KPI dashboards in Tableau.
- Deployed object detection models in production, reducing manual labeling time by 60% through automated pipelines.
- Designed and deployed a microservice-based architecture using Docker and Kubernetes for text classification and NER models, optimizing response times for 50+ custom models with MLOps principles.
- Developed a real-time facial recognition system for streaming video using gRPC, capable of identifying over 1000 individuals in digital media.
- Built and integrated LLM-based conversational agents (LangChain, Agno, MCP) connected to vector and SQL databases, enhancing user experience and insight extraction.

Researcher

Jan. 2024 – Apr. 2024

Cardiff University — Human-Centered Computing Lab

Cardiff, UK

- Led the integration of language models (GPT, LLaMA, Mistral) with robotics to improve human-robot interaction in educational settings.
- Designed and implemented a scalable system to process multisensory inputs and optimize responses in humanoid robots.

**Researcher** May 2021 – Dec. 2023

Universidad Privada Antenor Orrego — LABINM

Trujillo, Peru

- Developed an autonomous navigation system for an agricultural robot integrating SLAM, planning, and control with ROS. (Funded by FONDECYT project 171-2020)
- $\bullet$  Implemented deep learning-based computer vision pipelines achieving over 85% accuracy in crop evaluation. (Funded by PROCIENCIA project 79170-2022)

#### Machine Learning Intern

Feb. 2022 – Jun. 2022

CorAll Development & Research S.A.C.

Trujillo, Peru

- Optimized data collection and preprocessing for ML models, ensuring high-quality information.
- Trained deep learning algorithms, improving accuracy and efficiency in the retail sector.

#### SKILLS

Languages: Python (Advanced), C++, Bash

ML/AI Frameworks: PyTorch, Scikit-learn, LangChain, LangGraph, Agno MLOps & DevOps: MLflow, Docker, Kubernetes, Git, CI/CD, MinIO, Qdrant

Data Processing: Spark (basic), Pandas, NumPy

Cloud: Azure, AWS, GCP

Other: REST/gRPC APIs, FastAPI, Linux

Languages: Spanish (native), English (Advanced – TOEFL iBT 104/120), Japanese (Advanced – JLPT N2)

## SCIENTIFIC PUBLICATIONS

Comparative Analysis of LiDAR Inertial Odometry Algorithms in Blueberry Crops • $  https://doi.org/10.3390/engproc2025083009 $	Jan. 2025
Performance Evaluation of the ROS Navigation Stack using LeGO-LOAM • https://doi.org/10.1007/978-3-031-66961-3_16	Oct. 2023
Artificial Vision Strategy for Ripeness Assessment of Blueberries • https://doi.org/10.1109/INTERCON59652.2023.10326058	Nov. 2023
Deep Learning-based Segmentation and Classification for Artichoke Seedling Grading • $https://doi.org/10.1109/INTERCON59652.2023.10326060$	Nov. 2023
$ \textbf{LQR Control for the Active Suspension System of a Four-Wheeled Agricultural Robot } \bullet \ \text{https://doi.org/} 10.1109/INTERCON59652.2023.10326049} $	Nov. 2023
Autonomous Navigation of a Four-Wheeled Robot in a Simulated Blueberry Farm • https://doi.org/10.1109/ANDESCON56260.2022.9989865	Nov. 2022