

Krishna Sandoval Cambranis

jikjfeippk123@gmail.com | +52 (999) 981 09421 | [linkedin.com/in/krishna-sandoval-8b3206298](https://www.linkedin.com/in/krishna-sandoval-8b3206298) | github.com/Playmaker3334

AI / ML Engineer

PROFESSIONAL SUMMARY

Passionate **AI/ML Engineer** with extensive experience designing, deploying, and optimizing end-to-end machine learning solutions. Skilled in **LLM Fine-Tuning**, **Prompt Engineering**, **RAG (Retrieval-Augmented Generation)**, Computer Vision (YOLO, CNNs), and **LangChain** integration. Proven track record building agentic AI applications, including virtual assistants that leverage external APIs, real-time object detection systems, and advanced data pipelines in the cloud. Adept at **Docker**, **AWS**, and **distributed systems** for scalable MLOps. Excels in collaborative environments requiring strong communication, agile practices, and cross-functional teamwork.

CORE SKILLS

Machine Learning & AI: LLM Fine-Tuning, Prompt Engineering, CNNs, YOLO, RAG, LangChain

Programming Languages: Python, SQL, JavaScript

Frameworks & Libraries: PyTorch, TensorFlow, OpenAI API, NumPy, Pandas, Flask, FastAPI, Pyspark, Hugging Face

MLOps & Deployment: Docker, CI/CD, AWS (EC2, S3, Glue), MLflow, Docker

Data Engineering: ETL Pipelines, Data Extraction/Transformation, Database Integration, APScheduler

Computer Vision: YOLOv8, CNN-based tumor detection, Face Detection, OpenCV

Tools: Git, Linux, Cloudflare, Power BI, Shell Scripting

Soft Skills: Cross-Team Collaboration, Agile/Scrum, Documentation, B2-level English

PROFESSIONAL EXPERIENCE

Data Engineer

July 2024 – Present

RolPlay (Remote, Toronto, CA)

- Implement LLM-driven features, including **virtual assistants** using **RAG** and **LangChain** for complex data retrieval.
- Conduct **prompt engineering** and **model fine-tuning** to optimize GPT-based chatbots for outbound sales and specialized tasks.
- Build **agentic AI** pipelines that automate data queries, external API calls, and conversation flows with minimal human intervention.
- Develop cloud-friendly **MLOps** solutions on AWS and DigitalOcean, containerizing with Docker to ensure scalable performance.
- Collaborate with cross-functional teams to unify **machine learning** and **data engineering** best practices.
- Enhance data pipelines with **APScheduler**-based scheduling and thorough data integrity checks.

Data Engineer & Software Developer (Internship)

Dec 2023 – Aug 2024

Bestschools Company (Remote)

- Built robust ETL workflows for large-scale educational data using Python, improving data handling and transformation speed.
- Integrated **NoSQL** (Firestore) with controlled access policies, ensuring secure data operations.
- Automated **data ingestion** from multiple sources using **APScheduler** and containerized microservices with Docker.
- Collaborated on multi-tier applications, interfacing **Flask/FastAPI** endpoints with front-end dashboards and analytics.
- Documented technical workflows for efficient knowledge transfer and future onboarding.

PROJECTS

LLM-Powered Virtual Assistants

Conversational AI & RAG

- Developed **multi-lingual** virtual agents using GPT-based LLMs and custom **LangChain** pipelines.
- Implemented **RAG** approach (Retrieval-Augmented Generation) for accurate and context-driven responses.
- Integrated external REST APIs for data retrieval, enabling the assistant to perform complex real-world tasks autonomously.
- Utilized advanced **prompt engineering** and fine-tuning to meet domain-specific requirements.
- Deployed with **Docker** and orchestrated real-time inference pipelines for production use.

Brain Tumor Detection CNN

Computer Vision

- Built a **CNN** model to classify brain tumor vs. healthy brain scans, achieving high accuracy on test data.
- Utilized **OpenCV** for image preprocessing and performed data augmentation for robust generalization.
- Integrated a real-time detection pipeline using **Webcam** feed for demonstration and testing.

YOLO Human & Face Detection

Object Detection

- Leveraged **YOLOv8** for on-the-fly human and face detection in images and real-time video streams.
- Implemented bounding box overlays and **confidence scoring** for effective detection feedback.
- Collaborated on MLOps steps (version control, containerization) to ease deployment in a variety of environments.

AWS Glue-based ETL Pipeline

Data Engineering & Analytics

- Created an ETL workflow with **AWS Glue** to read from CSV files in S3, cast columns via PySpark, and join multiple datasets.
- Wrote output data in **Parquet** for optimized analytics with **Amazon Athena**.
- Scheduled Glue jobs for **incremental loads**, ensuring near real-time data availability.

EDUCATION

B.Sc. in Data Engineering

Universidad Politécnica de Yucatán

Mérida, Yucatán, México

ADDITIONAL INFO

Languages: Fluent Spanish, B2-level English

GitHub: github.com/Playmaker3334 – Projects on CNN-based tumor detection, YOLO object detection, LLM chatbots

Interests: Researching new AI frameworks, Kaggle competitions, reading AI/ML publications