

Cesar Flores

Jr. Software & ML Infrastructure Engineer

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PROFESSIONAL SUMMARY

Graduating in Data Science (Dec 2026, coursework complete) and junior software engineer with strong competitive programming credentials (4x IOI, ICPC Thailand Runner-Up, OII Silver Medallist) and hands-on ML infrastructure experience. Have built end-to-end Python pipelines, MLOps systems, and data infrastructure in personal and academic projects. Strong C++ foundation from years of high-performance algorithmic problem-solving. Looking to bring both research-grade algorithmic thinking and engineering rigour to an ML infrastructure role in a quantitative environment.

ACHIEVEMENTS & AWARDS

International Olympiad in Informatics (IOI)

4 consecutive years (2020-2023) at the world's premier pre-university informatics competition — placing among the top competitive programmers globally

ICPC — International Collegiate Programming Contest

Runner-Up, Thailand National 2024 — 2 consecutive years (2024-2025) competing at regional and national level

Ibero-American Olympiad in Informatics (OII)

Silver Medal: 2021, 2022, 2023 · Bronze Medal: 2019 · Jóvenes Talento national training program participant 2017-2023

Google Kickstart

46th place globally (2022) — top 0.5% of participants in Round F

EDUCATION

BSc in Data Science

2024 - 2026 (coursework complete, graduating: Dec 2026) · UTCC, Bangkok, Thailand · Full Scholarship

Relevant coursework: Machine Learning, Deep Learning, Neural Networks & Computer Vision, NLP & LLMs, MLOps, Data Engineering, Algorithms & Data Structures, DevOps, Linear Algebra, Probability & Statistics

TECHNICAL SKILLS

Core Languages:

C++, Python, SQL

ML & Data:

Pandas, NumPy, Scikit-learn, MLflow, DVC, OpenAI API, Gemini (Vertex AI), pgvector

Infrastructure & DevOps:

Docker, Linux, Git/GitHub, GCP, BigQuery, CI/CD, FastAPI, asyncio

Databases:

PostgreSQL, Oracle

Languages:

Spanish (Native), English (B2 — Duolingo English Test)

PROJECTS

Movie Recommendation System

github.com/esauflores/movie-recommendation-system

Built a production-style ML pipeline with semantic search using OpenAI embeddings and pgvector. Designed the full MLOps lifecycle: experiment tracking (MLflow), data versioning (DVC), containerised deployment (Docker), and an async FastAPI serving layer.

Stack: Python · FastAPI · PostgreSQL · pgvector · OpenAI API · MLflow · DVC · Docker

Classroom AI Grader

github.com/esauflores/classroom-ai-grader

Designed and implemented a multi-stage Python pipeline: ingests data from Google Classroom & Drive APIs, stores submissions in Cloud Storage, runs Gemini (Vertex AI) inference, writes results to BigQuery, and exposes analytics via a Hono.js API. Emphasis on pipeline reliability, modularity, and GCP infrastructure.

Stack: Python · Hono.js · Gemini (Vertex AI) · BigQuery · GCP · Docker · React

AI Hidden Health Signals (Team Hackathon)

github.com/RauPro/AI-in-Search-of-Hidden-Health-Signals

Team hackathon project — built an ensemble of CatBoost, LightGBM, and XGBoost predicting 9 disease onsets from clinical data. Hyperparameter tuning with Optuna, model explainability via SHAP, and a Vercel-deployed Next.js frontend for result visualization.

Stack: Python · CatBoost · LightGBM · XGBoost · SHAP · Optuna · Next.js · Vercel

PROFESSIONAL EXPERIENCE

Freelance Data Extraction Engineer

2025 · Remote · Freelance · 1 year

- Developed automated data extraction system integrating HDB, OneMap, and URA APIs to compile comprehensive data for 300+ Singapore properties
- Implemented browser automation with Playwright for Excel report generation and property flyer creation

Software Developer

2023 · El Salvador · 1 year

- Built and deployed core modules for a restaurant management system (PHP CodeIgniter, Oracle Database) to POS terminals; also developed a similar system for a large multi-branch hardware store; contributed to database schema design and code reviews

Olympic Informatics Instructor

2022 - 2023 · UES – Jóvenes Talento Program · El Salvador · 2 years

- Taught 40 students competitive programming in C++, covering advanced algorithms, data structures, and problem-solving strategies for national and international olympiads
- Delivered 1000+ hours of instruction — deep fluency in communicating complex algorithmic concepts clearly