Alessandra Zamora

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LinkedIn | **Website** | **HackerRank**

(Open to Relocation or Remote)

Professional Summary

Software engineer with experience in backend development, distributed systems, and applied machine learning. Completing a BSc (Hons) in Computer Science with a specialization in AI & Data Science at the University of London (Goldsmiths). Experienced in designing and deploying *end-to-end* systems, including ML pipelines, automation workflows, and production ready APIs. Seeking a full-time role in backend or ML engineering focused on reliable and scalable systems.

Technical Skills

Languages: Python, JavaScript (Node.js), SQL, C#, C++

Backend & Architecture: REST API design & implementation, Auth (JWT, OAuth), Relational schema design and query optimization, asynchronous processing, modular service architecture, data validation and serialization.

Machine Learning: Pytorch, TensorFlow, Scikit-learn, HuggingFace Transformers (fine-tuning, embeddings, inference), model evaluation, feature engineering, preprocessing pipelines, API integration.

Cloud & Infrastructure: Docker, CI/CD pipelines, Cloud deployment (GCP, Cloud Run, Vertex AI, DigitalOcean, Runpod), Linux CLI & server management, PM2, Experiment tracking (W&B)

Databases: MySQL, MongoDB, Firestore

Tools: Git, Postman, Jupyter, CUDA, Firebase

Education

Apr 2022 | apr 2026 | Grade: 81.5%

University of London (Goldsmiths) – *Bsc (Hons) Computer Science – AI & Data Science Specialization*

Experience

Nov 2022 - Present

Independent Systems Development

- Architected and built a modular automation platform combining OCR pipelines, forecasting logic and task allocation algorithms. Implemented backend services with FastAPI (async), Firebase/Firestore, and a React/TS frontend. Exposed model components via REST APIs and containerized services with Docker.
- Developed and deployed a small distributed IoT setup (Raspberry Pi + ESP32 nodes + sensors & actuators) to monitor air quality, lighting conditions and scheduled reminders. Implemented offline processing and rule-based triggers.
- Built "EVE", a local computer vision prototype using OpenCV and Python for hand/face/object detection, integrated with speech commands and integrated LLM-based automation workflows.
- Designed and implemented a financial tracking and market monitoring tool using the CoinMarketCap API. Built real time alerting and ranking logic based on volatility and movement patterns to automate portfolio monitoring.

Remote | Dec 2021 - Nov 2022

Bittensor – *Data Mining Engineer (Distributed AI / Blockchain)*

- Built and scaled a distributed mining cluster of 100+ computer nodes using DigitalOcean and Ansible automation, improving performance and monitoring efficiency with pm2 and W&B.

- Conducted NLP mining experiments using HuggingFace models like BERT, DistilBERT and transformers, optimizing parameters and boosting yield and network contributions.
- Proposed and influenced the solution to a consensus mechanism flaw ("cabal formation risk") by redefining reward gradients toward network-level usefulness instead of peer scoring, improving system stability prior to a key investor presentation.
- Translated core platform and onboarding documentation into Spanish and engaged Latin American universities for strategic outreach and research partnerships.

Remote | Oct 2019 - Jul 2020
Freelance – *Software Engineer / Web Developer*
- Designed and built full-stack applications and transformed low code websites for easier admin access and maintenance for small businesses, including e-commerce, product catalogs, and appointment systems.
- Delivered responsive UX, API integrations, and basic brand identity for clients including food businesses, pet shops and retail.
- Managed client communication, requirements gathering and post delivery iteration.

Certifications
- **Machine Learning A-Z: Hands-On Python & R In Data Science**– *Udemy*
- **The Complete Web Developer in 2022: Zero to Mastery** – *Udemy*