

Elisban Pacco

Experienced software engineer specialized in backend architecture, data pipelines, and applied machine learning systems.

paccoacchaelias@gmail.com
+51 999 995 083
github.com/elisbanpaco
linkedin.com/in/elisbanpaco
brevio.link

Relevant Experience

Lead Backend & AI Engineer · Independent Platforms 2026 — Present

- Architected and deployed brevio.link (URL shortening platform) and platanito.dev (editorial edge platform) using Astro SSR, React 19, Turso LibSQL, and PostgreSQL with sub-25ms global response latencies.
- Engineered an adaptive recommendation engine combining SVD matrix factorization with a Q-Learning reinforcement agent to dynamically balance exploitation vs. exploration under dynamic user tastes.
- Built an automated serverless MLOps CI/CD/CT pipeline using Databricks MLflow and GitHub Actions for continuous model validation and zero-downtime containerized Docker deployments.
- Developed a 16-dimensional multivariate profiling system using Mahalanobis distance with SVD pseudoinverse regularization to eliminate collinearity in career matching (< 10ms latency).

Software Engineering Intern · OTI – UNAP Jan 2026 — Jul 2026

- Completed software engineering internship at the university's central Sub-Unit of Software Development, collaborating with the core engineering team.
- Engineered high-concurrency RESTful APIs and automated database migrations in PostgreSQL with Docker containers for campus-wide administrative systems and student portals.
- Optimized backend microservices with FastAPI and TypeScript, enforcing strict type safety and zero-trust validation to achieve sub-30ms internal API query latencies.

IT Support & Developer Intern · Muni. de Coasa Feb — Mar 2025

- Architected and deployed a native Android mobile application using Kotlin, Jetpack Compose, and Clean Architecture to modernize municipal procedures and citizen service requests.
- Integrated municipal REST APIs and local caching for offline-first support, reducing in-person citizen administrative processing times.
- Provided technical support for municipal IT infrastructure, network routing, and server hardware workstations across administrative departments.

Undergraduate Researcher · UNAP Engineering 2024 — 2025

- Engineered a high-performance C++17 algorithmic pipeline using Normalized Compression Distance (NCD) and Kruskal MST, analyzing 18,000+ records in under 100ms.
- Developed spatiotemporal deep learning models (PyTorch ConvLSTM) and Google Earth Engine pipelines for Sentinel-2 satellite water quality monitoring in Lake Titicaca.

Skills

Programming Languages

Python, TypeScript, JavaScript (ES6+), C++ (C++17), C# (.NET 10), SQL, Kotlin

Libraries & Frameworks

PyTorch, Scikit-Learn, FastAPI, Next.js 16, React 19, Astro, NestJS, ASP.NET Core, Express, Svelte 5, Pandas, SciPy

Tools & Platforms

Docker, PostgreSQL, PostGIS, Databricks (MLflow), GitHub Actions, Turso LibSQL, Prisma 7, Drizzle ORM, uv, CMake, Git, Linux

Selected Projects

Adaptive RecSys & MLOps

Movie recommendation engine combining SVD & Q-Learning with automated serverless MLOps CI/CD/CT via MLflow and Render.

Mahalanobis Vocational AI

16D behavioral matching across 39 majors via covariance distance and Mem0 Cloud LLM reasoning (< 10ms latency).

NCD + MST Graph Engine (C++17)

Native C++17 Kolmogorov complexity clustering pipeline utilizing Kruskal MST on 18k+ records in milliseconds.

Education

Universidad Nacional del Altiplano

Bachelor of Science in Systems Engineering
PRONABEC Beca 18 National Scholar
Expected Dec 2026 · Puno, Peru

Interests

Competitive programming (ICPC South America Qualifier, LeetCode, Codeforces), spatiotemporal satellite AI, graph theory, causal machine learning, distributed systems.