FELIPE ALFONSO

Barrie, ON | +1 249-288-1569 | faaa1901@gmail.com | linkedin.com/in/felipe-alfonso | github.com/Pipetr/

SOFTWARE ENGINEER

PROFESSIONAL SUMMARY

Software Engineer with 5+ years building backend services and data pipelines at scale. Shipped production ETL and APIs in Python/SQL/Linux and C#/.NET, using Docker and BigQuery; adept at debugging async and multi-threaded systems. At Mercado Libre, automated competitor intelligence (**6 categories**, **200+ products/batch**), built DQ/anomaly detection over **10M+ records**, and hardened finance wrap-ups across **7 domains**. At FSRA (co-op), delivered performance fixes and reliable ETL for the Pensions platform. Pragmatic engineer focused on reliability, CI/CD, and observability.

SKILLS

- Languages: Python, C#, JavaScript (Node.js), SQL
- Data: Pandas, NumPy, Pandera, Jupyter, ETL, anomaly detection
- Back end: REST APIs, Express, AsyncIO/AIOHTTP
- Web scraping: Axios, Cheerio
- Databases: BigQuery, PostgreSQL, MySQL, SQL Server
- Cloud/Platforms: Linux, Docker, GCP BigQuery
- DevEx: Git (GitHub/GitLab), CI/CD, pytest, coverage, Jest
- Observability: New Relic, logging/alerts (Slack)
- Data quality: YAML schemas, schema validation
- Hardware/Video: ONVIF, PTZ IP cameras
- Front end & Web: HTML, CSS, responsive/mobile design, React (basic)
- Mobile: Android development (native), mobile UI/UX

EDUCATION

Georgian College – Barrie, ON — Two-Year Diploma in Computer Programming, 2025
University (Colombia) — B.Sc. Mechatronics Engineering, 2019

WORK HISTORY

Data Systems Analyst 06/2024 – Present
Federal Express (FedEx) – Barrie, ON

- Administered operational systems (GCCS, Genesis, Gatekeeper, Powership) and supported daily process coordination.
- Performed accurate data entry for air waybills, PODs, timecards, and driver movements.
- Reconciled cash/credit transactions, investigated discrepancies, and generated audit/compliance reports.
- Produced and analyzed operational reports (VRS, OSPR), resolving manifest and scanning inconsistencies.
- Managed equipment distribution, maintenance tracking, and vehicle in/out-of-service logs.
- Provided administrative support: employee communications, supply management, and documentation tasks.

Software Analyst Co-op 01/2025 – 04/2025
Financial Services Regulatory Authority of Ontario (FSRA) – Toronto

- Delivered performance fixes for UAT/PSP platforms; resolved critical defects impacting release readiness.
- Built ETL pipelines for the Pensions DB; improved ingestion reliability and traceability with logging/alerts.

- Performed system-level diagnostics in Linux; profiled apps and removed bottlenecks in I/O-heavy paths.
- Partnered with dev teams on specs, test plans, and deployment, ensuring on-time delivery.

Data Science Engineer 01/2021 – 06/2024
Mercado Libre LTDA – Colombia

- Automated competitor data collection across **6 categories**, processing **200+ products per batch**; integrated with backoffice batch crawling (`/items/crawl-batch`) to analyze **hundreds of items per run**.
- Built a comparator backoffice (Python, Docker) orchestrating near real-time comparisons across **hundreds of competitor SKUs** daily to inform pricing and assortment.
- Engineered data-quality frameworks (**fda-dqg-of**, **fwa-dqg-of**): authored **15+** notebooks and **10+** automated tests; standardized YAML schemas, validated with Pandera; integrated BigQuery and Slack alerting.
- Implemented finance wrap-up processors (**fury_mm_finance_wrapup_processor**) with schema checks across **7 macro-need domains**, supporting **millions of monthly transactions** and reducing schema drift/runtime failures.
- Designed anomaly detection pipelines processing **10M+ transactional records**, flagging thousands of outliers and improving downstream data reliability.

Junior Developer 01/2020 – 12/2020
Robotec Corp – Colombia

- Built a **C#/.NET desktop application** for access control: scanned vehicle license plates and validated against authorized whitelists to automate gate entry.
- Integrated **ONVIF** protocol with **PTZ IP cameras** (pan/tilt/zoom, presets, patrols) to synchronize camera actions with microphones activations in real-time to record meetings.
- Delivered tested components and device integrations, improving reliability of on-premise deployments.