

Nicolas Alejandro Cossu

Data Engineer & Forward Deployed Engineer

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Summary

Self-taught Data Engineer who builds, owns and ships production data systems end to end, from ETL pipelines and cloud architecture to the product on top. I turn ambiguous problems into systems people trust at scale, and I lead delivery from the first scoping call to production. Strong foundation in data science and analytics, with AI as a force multiplier across the stack.

Experience

- Luno**, Semi-Senior Data Engineer

New York, US (Remote)
Apr 2025 – present

 - Migrated **70,000+ users** from an undocumented legacy database to a modern system in production with **zero disruption**, via custom parsing scripts, fallbacks and automatic backups in a single 10+ hour run.
 - Engineered backend platforms architected to hold **100,000+ active users**, owning high-volume, high-concurrency APIs and production ETL pipelines.
 - Wrote the winning technical proposal **for a key client**, then designed its cloud infrastructure from scratch.
 - Built and maintained REST APIs (FastAPI), relational schemas and full backends on Snowflake, Airflow and AWS, with CI/CD, automated backups and migrations.
 - Promoted to Semi-Senior and made permanent; now guide projects and mentor a junior teammate within a 20-person multidisciplinary team working under Scrum.
- Exos**, Co-Founder & Engineer

Buenos Aires, Argentina
May 2026 – present

 - Co-founded a software studio delivering validated multi-tenant systems and bespoke platforms for Argentine SMBs, owning the full arc from scoping to production.
 - Owned **CongressIA** end to end, a national-scale platform for medical congresses (three connected systems for industries, physicians and organisers): negotiation, roadmap, estimation, architecture, backend, infrastructure and full frontend. Two people, three months.
 - Won the CongressIA proposal, then architected its cloud infrastructure from zero (Next.js, FastAPI, PostgreSQL, AWS).
 - Building **CapyThemAll**, an ecommerce product with a companion mobile pet game, running on the studio's multi-tenant ecosystem.

Education

- Technician**

San Vicente Technical High School, Electronics

Buenos Aires, Argentina
Mar 2019 – Dec 2025

 - **Top-performing student of the entire institution**, flag-bearer, GPA 9.45/10
 - Led the data infrastructure (MQTT, REST APIs, documented PostgreSQL schema) for the Siemens LOGO! national contest team.

Skills

- Programming:** Python, SQL, Bash
- Data & Infrastructure:** Snowflake, Apache Airflow, FastAPI, PostgreSQL, Redis, ETL/ELT, Data Warehousing, Database Design, REST APIs, CI/CD
- Cloud:** AWS, Google Cloud Platform, Microsoft Azure, Docker, Multi-tenant Architecture
- Data Science & Analytics:** Pandas, NumPy, Matplotlib, Seaborn, scikit-learn, XGBoost, PySpark, dbt, Tableau, Power BI
- AI & Automation:** AI Agents, AI Workflows, n8n, Make
- Frontend (AI-augmented):** With AI as a force multiplier I ship UX/UI and frontends (Next.js, React, React Native) at a high standard, and can take on frontend-related tasks when a project needs them.
- Ways of working:** Technical Leadership, Project Management, System Architecture, Scrum, Notion, Swagger
- Languages:** Spanish (native), English (fluent, EF SET C1)

Certificates and Awards

- **Harvard CS50:** Introduction to Programming with Python (2024); Introduction to Databases with SQL (2025)
- **IBM Data Science:** Introduction to Data Science, Data Science Methodology, Data Science Tools (2024)
- **EF SET English Certificate:** C1 Advanced (2025)
- **Siemens LOGO! National Contest:** Recognition, as Project Manager & Data Engineer (2025)
- **Pedro B. Palacios National Award:** La Plata Deliberative Council (2025)