

Albert Dulout

<https://www.linkedin.com/in/albert-dulout/>

Applied AI Engineer / Data Scientist

PROFILE

Applied AI engineer with 3+ years of experience building practical AI systems for enterprise, public-sector, and startup teams. Works across discovery, retrieval and model workflows, software engineering, cloud delivery, evaluation, and team enablement.

CAPABILITIES

Programming & engineering: Python, TypeScript, C#, Java, JavaScript (Node.js, React), SQL, R, VBA, FastAPI, .NET, REST APIs, PostgreSQL, ETL, Terraform, and system integration.

AI, ML & CV: LLM applications, RAG, multimodal AI, computer vision, OCR, PyTorch, scikit-learn, reinforcement learning, diffusion fine-tuning, MLflow, Hugging Face/TGI, model evaluation, and forecasting.

Data & analytics: BigQuery, Data Studio, SAP, Google Ads API, Google Sheets API, Pandas, Tableau, reconciliation, and reporting.

Cloud, MLOps & platforms: Azure AI Foundry, Azure OpenAI, AI Search, Functions, Container Apps, Docker, GitHub Actions, Azure DevOps, Bicep, and Git.

Optimization & BI: OR-Tools, CPLEX, operations research, route optimization, graph theory, and Tableau.

AI-assisted development: OpenAI Codex, GitHub Copilot, Cursor, Claude Code, MCP integrations, coding agents, pull-request automation, and test generation.

EXPERIENCE

PALO IT - Innovation Lab, Singapore

Mar 2023 - Present

Data Scientist (promoted Feb 2025; previously Junior Data Scientist)

- Designed and built end-to-end software and hardware proofs of concept for enterprise and public-sector teams: scoped problems, set success metrics, and delivered iterative prototypes under real-world constraints.
- Mentored AI interns and taught client teams practical GenAI and AI-assisted development workflows to automate repetitive tasks, improve delivery practices, and increase day-to-day efficiency.
- Worked directly with stakeholders to translate business needs into actionable technical solutions; wrote clear documentation, presented tradeoffs, and demonstrated results.
- Evaluated emerging open-source and commercial AI tools, then turned useful patterns into repeatable engineering workflows for project teams.
- Built a GenAI image application using a fine-tuned diffusion model with Python, Azure, and GitHub Actions.
- Benchmarked, fine-tuned with QLoRA, and deployed pretrained transformers for code generation on local servers and Azure using Hugging Face TGI.
- Delivered applied-AI work across LLM and RAG applications, computer vision, optimization, backend services, MLOps, and Azure cloud delivery.

Papernest, Barcelona

Feb 2022 - Aug 2022

Analytics Engineer Intern

- Conducted data analysis using SQL (BigQuery), Data Studio, Python, and Google Sheets in coordination with the SEA Europe team.
- Created automated Slack alerting with its API, SQL, Google Sheets, and JavaScript.
- Built campaign-improvement tools with Pandas, the Google Sheets API, and the Google Ads API.
- Improved the Google Ads conversions-import process by 6% through ETL improvements.

Nestle Europe, Paris

Jun 2021 - Dec 2021

Master Data Analyst Intern

- Created an Excel and VBA price simulator from data extracted with SAP and SQL.
- Automated and simplified data-management and analysis processes.
- Evaluated Alation data-governance tooling in coordination with Purina USA.

SELECTED WORK

Client identities and confidential implementation details are intentionally omitted.

Enterprise knowledge workflows: Built retrieval and comparison workflows using hierarchical chunking, hybrid search, semantic reranking, structured LLM outputs, asynchronous batching, resilient retries, backend services, and Azure delivery.

Route optimization platform: Designed a planning product for heterogeneous fleets, time windows, capacities, configurable objectives, route KPIs, sustainability reporting, scenario comparison, and cloud deployment.

Resilient cloud ingestion: Built Azure ingestion workflows with cursor pagination, checkpoints, retries, dependency-aware orchestration, PostgreSQL persistence, reconciliation safeguards, private networking, infrastructure as code, and CI/CD.

EDUCATION

IMT Atlantique - Engineering Degree / MSc, Data Science and Optimization

2019 - 2023

Modules: Computer vision, data mining, big-data architecture, NLP, optimization algorithms, machine learning, time-series forecasting, blockchain development, and data visualization.

Lycee Montaigne - Preparatory Class, Mathematics major; physics and chemistry minor

2016 - 2019

CERTIFICATIONS, LANGUAGES & INTERESTS

Certifications: Microsoft Azure AI Engineer Associate; GitHub Copilot; Google Data Analytics Professional Certificate; IELTS Academic 8.0 / C2.

Languages: French (native); English (IELTS 8.0 / C2, 12 years in English-speaking countries); Spanish (conversational); Russian (intermediate).

Interests: Rugby (8 years), judo (10 years), running (20 km Paris), diving (PADI Advanced Open Water), weightlifting, and cooking.