

Andrew Ryan

Data Quality & AI Automation Consultant

Python · SQL/PostgreSQL · n8n · internal tools

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Based in Belgium · Freelance via my Belgian company · Remote, European hours · Available immediately

Profile

Freelance data and automation consultant. I make operational data trustworthy: I audit systems against the client's own source files, fix what doesn't match, and add controls so bad data can't get back in. I build with Python, SQL/PostgreSQL and n8n, use AI-assisted development (Claude Code) to deliver quickly, and don't call anything done until it has been checked against real data. Five years across analytics, operations automation and software delivery, most recently for international and humanitarian organisations. I work directly with business users, in English and French.

Selected results

Payroll allocation platform, international human rights NGO (via a technology consultancy):

- **219 of 222** cells of the client's coverage workbook matched after an end-to-end audit that fixed 17 defects.
 - **€27,830** of payroll cost found attached to no one: 8 people paid but missing from the roster.
 - **3,138 lines and 1,342 columns** checked read-only in production after a rounding fix: zero discrepancies.
 - **About +7%**: the payroll inflation for a full year of one office, prevented by stopping a re-import.
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Core skills

- **Data quality and integrity:** reconciliation against source files, validation rules and controls, import and re-import guards, root-cause analysis of data inconsistencies, rounding and precision issues, mutation testing on financial rules
 - **Data and pipelines:** Python (Pandas, SQLAlchemy), SQL/PostgreSQL, Supabase, schema design and Alembic migrations, ETL, n8n, REST/webhook integration, CSV/XLSX ingestion
 - **Applications and reporting:** Flask, FastAPI, React, TypeScript/Next.js, Chart.js, Recharts, dashboard design, pytest/Vitest, Git/GitHub Actions, Docker
 - **AI governance and data protection:** AI usage policy drafting, data classification for AI use, security-awareness guidance, GDPR and security documentation
 - **AI and LLM:** AI-assisted development (Claude Code), MCP servers, n8n AI agents
 - **Consulting:** AI readiness assessment, requirements gathering, stakeholder workshops, client-facing documentation in English and French
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Professional experience

Data & AI Consultant (external contractor) · Mar 2026 to present

Relief Applications, technology consultancy for international and humanitarian organisations

- **Payroll allocation platform** (international human rights NGO; Python/Flask, PostgreSQL, React): audited the timesheet and payroll allocation app our team built end to end against the client's own files and fixed 17 defects. The app then reproduced the December 2025 allocation matrix to the cent and matched 219 of 222 cells of the coverage workbook. 2025 payroll reconciled against the source file: 80 of 92 employees within one euro, with the gaps documented.
- **Controls and guardrails:** fixed reconciliation controls that reported "compliant" on empty months. Guarded closed months and deposited payroll against being overwritten by later imports. Stopped a recommended re-import that would have double-converted a year of one office's payroll (about +7%).
- **Verification before release:** caught a stale source file before deploy that would have created about 200 false budget overruns. After a rounding fix, a read-only production check of 3,138 lines and 1,342 grid columns found no discrepancies.

- **Data gaps surfaced:** identified 8 people paid through payroll but missing from the personnel roster (€27,830 unattached) and flagged it to the client. Added separate storage so manual overrides survive payroll re-imports.
- **Delivery with business users:** unblocked the client's month-close, stuck on contradictory instructions across six layers of the app. Shipped feature requests from client staff (split allocations, Excel paste into grids, multi-month uploads, part-time working patterns), checked each against production data, wrote client updates in French, and handed over once the client was running the tool independently.
- **AI governance** (humanitarian accreditation body, part-time): drafted the AI usage policy, tying what consultants and auditors may put into personal AI accounts to what data leaves the account rather than which tool is used. Revised phishing-response guidance. Compared options for connecting Claude to SharePoint and NAS document stores (permissions, client-folder separation, where data is processed).
- **AI readiness assessments** for international institutions in conservation, development and disaster-risk financing: current-state audit, opportunity mapping, vendor comparison and recommendations for non-technical leadership.

Data & Automation Consultant · Jan 2025 to present

Andrew Ryan Consulting, independent practice (Belgium)

- **Data pipelines:** supplier scraping and enrichment pipeline across Portuguese directories for Ten Lives, a regenerative community festival in Portugal (Python, Google Places API), deduplicated and filterable by region, certification and category. Volunteer onboarding pipeline for the same client, in progress.
- **Operational dashboards:** six demo dashboards on synthetic sample data that read a user's own CSV/XLSX in the browser, with a Content-Security-Policy verified by a 40-check automated harness and published security and GDPR documentation.

Growth & Automation Advisor (contract) · Aug 2025 to Jan 2026

Rapidus.ai

- Designed automated knowledge bases and lead-qualification flows. Translated business requirements into n8n workflows and internal AI agents.

Co-Founder · Jan 2023 to Mar 2025

Galene Pathways, marine technology

- Built internal data workflows and scripts for environmental data pipelines. Ran user discovery to validate data assumptions and human-in-the-loop logic.

Teaching Assistant, Data Science · May 2023 to May 2024

Le Wagon

- Supported students through Python, SQL and machine-learning coursework: debugging, code review and one-to-one explanation.

Operations Automation Specialist · Dec 2020 to May 2021

Shippr, logistics

- Designed and maintained operational workflows for account access and documentation. Kept automation flows consistent and compliant between operations and engineering.

BI & Analytics · Mar 2018 to Aug 2018

Havas Media

- Built dashboards analysing user behaviour. Researched AI trends in marketing and personalisation, reporting to the CEO.

Education

Data Science Bootcamp · 2022

Le Wagon: Python, machine learning, SQL, deep learning, Docker

Languages

English, French: C2 (fluent) · Dutch, German: B1 · Spanish, Portuguese: A1