Ian Ronk

Data & AI Architect · Project Lead

Amsterdam, NL · ian@ronk.org
LinkedIn · GitHub · ianronk.nl

> Data & AI Architect who builds systems end to end and leads the projects that put them into production: Azure and Linux infrastructure, big data and geodata pipelines, AI that reads documents and email, and the automation around it. Previously Head of Data / Data & AI Lead at KR&A.

TOOLS

Python · SQL · Azure · Linux · Docker · PostGIS · Airflow · Iceberg · DuckDB · FastAPI · LLMs · PyTorch

PROFESSIONAL EXPERIENCE

Independent work 2026 – present

- Order-intake agent and light ERP for a trading company: orders, quotes and negotiations by email in three languages become proposals a person approves; audited, undoable, partly on Azure; in acceptance testing.
- Modular internal platform (in progress): workflows assembled from small blocks in which AI agents propose decisions and a person accepts or overrides them, every decision traceable.
- Internal CRM and outreach engine: mailbox sync, rule-plus-LLM email classification and AI-drafted replies that a person sends.

Head of Data / Data & AI Lead, KR&A, Amsterdam Jul 2025 – Oct 2026

- Led the data team (built up to four engineers) and owned the data architecture and its eight production servers, serving pension funds, real estate investors and national statistical offices.
- Project lead of the Connectivity Score: an accessibility score for 38 countries, built over 1TB+ across 13 servers into a production API, now used in a.s.r. real assets' PULSE platform.
- Introduced LLM and OCR document extraction, replacing weeks of manual data entry.

Data Scientist & Technical Lead, KR&A, part-time Jun 2022 – Jul 2025

- Technical lead of a three-year Eurostat study on monthly house-price indices from web-scraped listings in 13 EU countries, whose results Eurostat published in a statistical working paper: eight people across two organisations, from scraping and storage on Azure to the regressions.
- Re-architected the data platform from legacy systems to Airflow, Iceberg and FastAPI; weekly collection of 300k records.
- Client-facing throughout, with Eurostat, national statistical offices and pension funds.

Junior Data Scientist, KR&A, part-time Oct 2021 – Jun 2022

- Reproducing a flood simulation's labels from local features (BSc-thesis project): 97% accuracy on the yes/no 20-year label, 73.8% on four risk classes.
- Improved the spatial API's response times tenfold through geospatial query optimisation, resulting in promotion.

Junior Full-Stack Developer, Exact (former SRXP), part-time Sep 2019 – Oct 2021

- Enterprise expense-declaration software (EmberJS, PHP) under CI/CD and testing.

PUBLICATIONS & RESEARCH

- **Feasibility of monthly house price indices and price-level indicators from web-scraped data**, Eurostat working paper by R. Evangelista on the study I was technical lead of.
- **Building an Agent-Based Model to Explain Gentrification in European Cities** (MSc thesis, 8/8): Amsterdam · Utrecht · Milan.

EDUCATION

MSc Data Science & Business Analytics, Bocconi University · 107/110 2023 – 2025

Focus: Finance · Econometrics · Statistics · NLP

Thesis: Building an Agent-Based Model to Explain Gentrification in European Cities

BSc Artificial Intelligence, University of Amsterdam · 7.6/10 2019 – 2023

Minor in Linguistics, University of Amsterdam

Erasmus minor, Università di Bologna (UNIBO)

Certifications: DataExpert.io Data Engineering Boot Camp (2025)

LANGUAGES & SOFT SKILLS

Dutch C2 · English C2 · Italian B2/C1 · German B2 · Spanish A2

Multi-year project lead · Client & stakeholder communication · Presenting and defending methodology to technical and senior audiences

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PROJECTS

Connectivity Score: accessibility for 38 countries

Project lead. An accessibility score grounded in academic research: multi-modal graphs per region, a custom routing engine and a 13-server distributed build, served as an API; used in a.s.r. real assets' PULSE fund-analysis platform.

Python · PostGIS · Routing · Distributed computing · S3 · Linux · FastAPI

Sales systems & automation

An order-intake agent and light ERP that turns multilingual email into proposed orders and quotes for a person to approve, and an internal CRM with AI-drafted outreach. Pseudonymised data, one model gateway with EU hosting, every action audited.

AI agents · LLM · FastAPI · React · Next.js · PostgreSQL · Azure · Docker

Modular internal platform (in progress)

Workflows assembled from small blocks; AI agents propose decisions and people approve them, every decision traceable.

AI agents · Workflow automation · Modular architecture

Eurostat house-price index: 13 EU countries

Technical lead. Scraping, cleaning, matching and geo-enrichment of 30 million offers, and hedonic index regressions with typed per-source configuration. Eurostat published the results in a statistical working paper.

Python · Scrapy/Selenium · Airflow · Iceberg · MongoDB · PostGIS · R · Azure

LanguageBuddy: AI language tutor

Self-hosted tutor for Dutch, Italian and Spanish: chat and voice calls with an LLM tutor, CEFR placement and spaced repetition that turns every mistake into the next day's exercises.

FastAPI · LLM · Speech (TTS) · SQLite · Docker · Linux