

E-commerce operations dashboard — Rails, Python AI scraping & SQL Server

Region: Germany (CSR Informatics GmbH) **Duration:** Jun 2023 – Jun 2024 **Team:** 4 engineers

Custom e-commerce operations dashboard — Ruby on Rails core, AI-powered web scraping with OpenAI, Python ETL scripts, and SQL Server storage for operators who need catalogue intelligence, not manual spreadsheet wrangling.

CHALLENGE

Operational catalogue data at scale

Extract, transform, and present e-commerce operations data from heterogeneous sources — with repeatable pipelines, operator dashboards, and cost-controlled AI-assisted ingestion.

APPROACH

Rails product shell with Python integration layer

- Ruby on Rails dashboard for operator workflows and admin tooling
- Python scripts for extraction, transformation, and scraping orchestration
- OpenAI-assisted parsing where structured prompts beat brittle selectors alone
- SQL Server for efficient storage and reporting queries

TECHNOLOGY

Stack & delivery surface

Ruby on Rails Python OpenAI SQL Server Web scraping ETL

OUTCOMES

What the programme proved

- Year-long programme — demonstrates sustained Rails + Python pod delivery
- Pattern for “outgrown Shopify” operators needing custom back-office engines
- Cross-stack proof supporting sevendyne.com/projects/ror/ and [/python/](https://sevendyne.com/projects/python/)