Engineer Data

Automation & CI/CD

22 achievements

Connect the parts of your system

The work collected under “Automation & CI/CD” shows one part of a working system. We can help connect that part to the rest of your operation. Numbers arriving where they are needed, on a schedule, without anyone copying a spreadsheet at the end of the month.

Explore our services Get in touch →

Find a comparable challenge

Follow an example that resembles your situation. Its review describes the decisions behind the result, beyond the technology label. One infrastructure plan for 14 departments — 14 research departments on one infrastructure plan

One infrastructure plan for 14 departments Get in touch →

30 days of electricity data in 180 ms

Engineered hourly electricity-consumption aggregation variants in Python, SQL and Bash + Jq, with the Python benchmark processing one 30-day JSONL dataset in 180ms.

Resolved 1,000 issues in geographical data

Resolved 1,000 issues in geographical data and time-series data, using GDAL, ArcGIS, PostGIS, Mapbox, QGIS, SQL (PL/pgSQL, Transact-SQL), Bash, ensuring high-quality big data processing.

Designed and ran 6 ETL/ELT pipelines

Designed, implemented, and administered 6 ETL/ELT pipelines, utilizing Google BigQuery, MSSQL, PostgreSQL, Shell scripting, PL/pgSQL, and Transact-SQL, integrating data for efficient Python API processing.

Built the company's first observability dashboard

Developed and launched the company's first observability dashboard, providing real-time system performance insights and data visualization on the large office TV.

Ran 10 PostgreSQL and MS SQL servers on Ubuntu

Designed, deployed, and maintained 10 PostgreSQL and MS SQL servers on Ubuntu Linux VPS, ensuring optimal server performance and reliability.

Wrote 1,000 RBAC rules to secure Linux servers

Enhanced data security by implementing 1,000 RBAC rules for developers, application instances, PostgreSQL, MS SQL, and other Linux servers, preventing unauthorized access; documented with Ansible automation.

Automated GIS SaaS deployment with GitHub Actions

Automated GIS SaaS application deployment, data processing, and reporting system using GitHub Actions CI/CD, Python, Bash, and SQL.

Automated delivery of 20 GIS data pipelines

Automated delivery of 20 GIS data pipelines and app data ETL processes, streamlining infrastructure automation and reporting.

Automated 100 critical data backups using Barman

Automated 100 critical data backups using Barman, Google Cloud, Bash, and Python, ensuring data integrity across databases.

Saved 4,000 hours with GitHub and GitLab CI/CD

Streamlined data analysis and software development processes, saving 4,000 hours by introducing GitHub, GitLab, Bash, and Python CI/CD practices.

Developed a Data Analytics reporting system

Developed a Data Analytics reporting system, increasing quarterly software revenue by 400% through Python-based PDF reports.

Automated data processing in Python and PL/pgSQL

Automated data processing tasks using Shell scripting, PL/pgSQL, Python, and Transact-SQL, increasing productivity and efficiency.

Engineered 600 PL/pgSQL ETL/ELT pipelines

Engineered 600 PL/pgSQL-based ETL/ELT pipelines to streamline complex data processing workflows across multiple PostgreSQL development and production environments.

Designed a time-management and reporting system

Designed a time-management and reporting system that remained in production use for years without significant modification.

Moved slow work onto a River job queue

Moved slow work off the request path onto a River job queue — 15 worker modules, 8 scheduled tasks and 20 pg_cron jobs — so a request returns while the work behind it carries on.

Wrote a scope rule after a credential leak

Wrote a scope rule into the repository after a restructure carried another company's inventory, firewall allowances and prose into it — and kept the quarantined residue under the secret scanner rather than excluding it.

Replaced 963 metadata blocks with one graph

Replaced 963 anonymous structured-data blocks that restated the company 1,671 times with one linked graph of 16 types minted from stable origin identifiers.

Built a database-driven CV generator

Built a database-driven CV, references, portfolio and cover-letter generator in Python — 41 modules, 10,580 lines — rendering six output formats from one 23-table SQLite source assembled by a 19-step idempotent pipeline.

Wrote tests for the checkers themselves

Wrote tests for the checkers themselves after establishing that a checker fed only clean input will one day report clean because it read nothing — planting a misspelling to confirm the spell-check finds it, and taking an id range from the database rather than from a number in the test.

Built a cross-language figure check

Built a cross-language content check that fails when a translation drops a figure the English states, and when a language uses notation it does not use — finding two Danish descriptions missing a metric and sixteen Ukrainian spans quoting in the English style.

Know the licence of everything you ship

Audited 644 Rust crates for licence compatibility on every build, and proved the check fires by rewriting one crate's licence and by moving the pinned core revision without regenerating.

Measured 13 addresses with no tracking

Measured thirteen addresses from the web server's own access log alone — no cookie, no tracker and no third-party service — masking the client network as each line is written, and folding the result into a permanent archive of 21 daily counts and 20 monthly facets.

Focus the engineering effort

Bring a representative dataset, the questions it must answer and the current bottleneck. We can agree how to measure quality, throughput and recovery.

See what it costs Get in touch →

Put the subject in your context

Tell us how “Automation & CI/CD” appears in your own system. We can help choose the relevant service and define the work around it.

Explore our services

welcome@engineer.company +45 50 10 61 84 Copenhagen, Denmark

Take this page with you

Contact card

Carefully Crafted With Love by D.

CVR 45969703 · Tagensvej 105C, 3. th, 2200 København N

Copyright © 2025 – present · Engineer ApS · All rights reserved.

Printed from https://data.engineer.company/categories/automation/