

HILASSOUN A. ROLAND SANOU

Data Engineer — Data Pipelines | ETL/ELT | APIs | Data Warehousing | BI

Mersin, Türkiye · +90 536 992 12 17 · rolandS01@outlook.fr

linkedin.com/in/hilassoun-a-roland-sanou · github.com/rolandsanou

PROFESSIONAL SUMMARY

Data engineer with 3+ years of hands-on experience designing, developing and maintaining robust, scalable data pipelines at C-Prot, a cybersecurity company operating internationally. Proven experience in large-scale data ingestion, transformation and orchestration, REST API development, data warehousing and BI delivery. Strong skills in SQL, Python, Java and C++, with a solid command of ETL tooling, automation workflows and agile practice. Working knowledge of SAP BI tools (SAP Data Services, SAP IDT, SAP Web Intelligence) and streaming platforms (Kafka). Demonstrated ability to work with cross-functional teams and to provide quality technical support in demanding environments.

PROFESSIONAL EXPERIENCE

Data R&D Engineer — Pipelines, APIs & Automation

C-Prot Siber Guvenlik Teknolojileri A.S. · Mersin, Türkiye · January 2025 — Present

- Designed and built end-to-end data pipelines: collection from real-time data feeds, feature engineering, transformation and loading into an internal data warehouse.
- Developed and maintained REST APIs for partner and third-party system integration, in line with security policy (authentication, encryption, access control).
- Set up orchestration and automation workflows with Apache Airflow and n8n: automatic retraining, feed ingestion, alert enrichment and report generation — cutting manual operational load by 60%.
- Modelled and structured data architectures to optimise query performance and data governance (PostgreSQL, MySQL).
- Deployed and operated data infrastructure environments through Docker and CI/CD pipelines (Jenkins, GitHub Actions), guaranteeing high service availability.
- Worked across R&D, security and product teams to translate business needs into data solutions.

Data Engineer — Mobile Data Integration & Processing

C-Prot Siber Guvenlik Teknolojileri A.S. · Mersin, Türkiye · September 2024 — January 2025

- Built ETL pipelines for the extraction, transformation and loading of data from Android mobile applications (telemetry, event logs, user behaviour).
- Developed Python ingestion and processing scripts for structured and unstructured data (static features, API calls, behavioural sequences).
- Implemented data validation and quality-control mechanisms at every pipeline stage, guaranteeing data integrity in production.
- Optimised analysis models for embedded deployment via TensorFlow Lite and ONNX Runtime — real-time inference under hardware constraints.

Software Engineering Intern — Development & Data Integration

C-Prot Siber Guvenlik Teknolojileri A.S. · Mersin, Türkiye · February 2023 — August 2024

- Built data-collection pipelines gathering anonymised threat telemetry, feeding model retraining and improvement cycles.
- Developed real-time data processing features (scanning engine, notifications) for C-Prot's mobile security application.
- Contributed to agile sprints, code reviews and CI/CD pipeline maintenance for the development team.
- Wrote technical documentation covering data flows, operating procedures and transformation rules.

TECHNICAL SKILLS

Area	Technologies
Databases	PostgreSQL, MySQL, SQLite — complex SQL queries, optimisation, modelling; working knowledge of Oracle & Sybase IQ
Programming languages	Python (advanced), Java, C/C++, SQL, Bash, JavaScript, Go, Scala (basics)
ETL / Data pipelines	Apache Spark, Apache Airflow, n8n, pandas, NumPy — ingestion, transformation, orchestration
Streaming	Kafka (basics), RabbitMQ-like patterns, webhook-based pipelines, event-driven orchestration
APIs & Integration	REST APIs (Flask, FastAPI, Django), SOAP basics — development, hardening, documentation, maintenance
SAP BI tools	SAP Data Services (Data Integrator), SAP IDT (Information Design Tool), SAP Web Intelligence 4.2/4.3 (basics)
BI & Visualisation	Power BI, Tableau, Streamlit, Gradio, Matplotlib, Seaborn, Plotly
Infrastructure & DevOps	Docker, Kubernetes, CI/CD (Jenkins, GitHub Actions), AWS (S3, Lambda, SageMaker), GCP, Azure ML
MLOps & Warehousing	MLflow, Weights & Biases, data warehouses, dimensional modelling
Methods & Security	Agile methods (Scrum/Kanban), GDPR & personal data, cybersecurity principles

EDUCATION

M.Sc. Computer Science — Artificial Intelligence

Mersin University, Türkiye · 2025 — 2027 (in progress)

Research: LLMs, adversarial machine learning, Transformer architectures, AI-driven threat intelligence.

B.Eng. Computer Engineering

Mersin University, Türkiye · 2020 — 2024

Final-year project: hybrid recommendation system (collaborative filtering + content) — Python, scikit-learn, Flask.

CERTIFICATIONS

- Machine Learning Specialization — Coursera (Andrew Ng / Stanford)
- Penetration Testing Certification — Coursera

KEY PROJECTS

Real-Time Data Processing Pipeline — C-Prot, production

End-to-end ML pipeline: system event collection, transformation, warehouse loading and real-time classification — deployed to 5M+ users.

Technologies: Python, Apache Spark, Airflow, PostgreSQL, Docker, ONNX, CI/CD

REST APIs for Partner Integration — C-Prot

Designed and deployed secure REST APIs interfacing the internal platform with partner systems, including access-rights management and technical documentation.

Technologies: Python, FastAPI, Flask, Docker, JWT authentication, GitHub Actions

Data Workflow Automation with n8n & Airflow — C-Prot

Architected and implemented an orchestration system automating data feed ingestion, enrichment and report generation — cutting operational load by 60%.

Technologies: n8n, Apache Airflow, Python, webhooks, event-driven orchestration

LANGUAGES

French: native · **Dioula:** native · **English:** C1 (advanced) · **Turkish:** fluent