INDEPENDENT MIND. HANDS-ON ENGINEERING.

Engineering that connects.

Built for production.

Bringing AI into production. Connecting the enterprise.

I build the platforms, pipelines, and systems that turn data and AI into dependable products. EffiGen is my independent consultancy, bringing together 13+ years of software engineering, machine learning, and architecture experience.

EffiGen Oy · effigen.fi · contact@effigen.fi

Industry experience	Architected & owned	Cloud platforms
13	20	03
+ years	+ solutions	AWS · GCP · Azure

01 / EXPERIENCE

The work.The progression.

2024 — Present CURRENT ROLE

Freelancer

ML & Enterprise Integration Architect

Production AI meets enterprise integration

- Build ML and generative AI platforms, with agent runtimes and tool integrations on Amazon Bedrock AgentCore.
- Design enterprise API platforms with Azure API Management (APIM), Apigee, and Amazon API Gateway.
- Develop MLOps tooling, AWS Batch data pipelines, and custom workflow orchestration for data scientists and ML engineers.
- Connect enterprise systems through secure APIs and repeatable cloud infrastructure using Terraform, AWS CDK, and GitHub Actions.

MLOps | Azure APIM | Apigee | Amazon API Gateway | Bedrock AgentCore | AWS CDK

2023 — 2024

Advertising Technology

Senior Machine Learning Engineer

Generative AI, delivered to production

- Built and deployed generative AI models and the AWS CDK infrastructure supporting data and model workloads.
- Orchestrated workflows with Prefect and managed ML solutions with ClearML and MLflow.
- Developed real-time, low-latency APIs and data pipelines.

Generative AI | AWS CDK | Prefect | ClearML | MLflow

2021 — 2023

Industrial & Logistics

ML Engineer / Architect · Data Driven Services

Connecting data, platforms, and clouds

- Built SageMaker MLOps pipelines and an AWS data lake, including migration and replication from GCP.
- Designed a multi-account AWS strategy and cross-account data sharing, with SAP integrations into GCP.
- Created reusable AWS CDK constructs and infrastructure with Terraform, Ansible, and CloudFormation; automated delivery with AWS developer tools and Bitbucket Pipelines.
- Orchestrated data workflows with Airflow and Glue, deployed services on ECS Fargate, and built Flask and FastAPI REST APIs.

SageMaker | AWS Glue | Airflow | AWS CDK | GCP | FastAPI

2019 — 2021

Telecom & Analytics

Data Scientist / Data Engineer · Advanced Analytics Solutions

Analytics at the scale of millions

- Developed a telecom recommendation engine delivering personalized experiences to more than 3 million users.
- Built NLP models to classify support conversations and analyze sentiment across conversation stages.
- Developed Spring Boot REST APIs and deployed applications with Docker, Kubernetes, and GitHub Actions.
- Built big-data aggregation pipelines, including Azure Databricks and workloads across Azure, GCP, and AWS.

NLP | Spring Boot | Databricks | Docker | Kubernetes | GitHub Actions

2016 — 2019

Telecom Networks

Data Scientist · Analytics and Insights

Building a machine learning platform from the ground up

- Conceived, architected, and implemented a model to predict critical situations in mobile networks.
- Built the ML platform with Scala, MapR, and Spark, including training and testing pipelines that accommodate new features.
- Applied dimensionality reduction and time-series validation, with real-time model performance visibility in Grafana.

Scala | Spark | MapR | Machine learning | Grafana

2011 — 2014

IT Services

Software Engineer

The software engineering chapter

02 / EXPERTISE

A connected skill set.

Architecture decisions grounded in implementation.

01

Machine learning & AI

Generative AI and LLMOps
ML platforms and MLOps
PyTorch and TensorFlow

02

Data & streaming

Spark, ETL / ELT, and Apache Iceberg
Kafka, Pub/Sub, Event Hubs, and Kinesis
Data lakes across AWS, GCP, and Azure

03

Cloud & engineering

Python, Java, and Scala
Terraform, AWS CDK, Ansible, and ARM
CI/CD with Jenkins, AWS, Bitbucket, and GitHub

04

Identity & access

CIAM, SSO, and federation
Agent identity and scoped delegation
RBAC and fine-grained authorization

04 / EDUCATION

The foundations.

2014 — 2016 · 9.26 GPA

M.Sc. Computer Science and Information Security

Indian Institute of Information Technology and Management Kerala

2008 — 2011 · 85.50%

B.Sc. Computer Science

Naipunnya Institute of Management and Information Technology, Thrissur · University of Calicut

05 / LANGUAGES

In conversation.

English
Communicative · spoken and written

Swedish
Communicative · spoken and written

Hindi
Communicative · spoken and written

Malayalam
Native