

# IGOR NIKOLAIENKO

Data Engineer & Data Scientist

+49-162-605-4887

nikolaienko@hotmail.de

nikolaienkoigor.github.io/cv

Cologne



Focused on data science and engineering, my recent work revolves around preventing fraud and tackling anomalies in logistics operations. This involves leveraging cutting-edge technology, both backend and frontend, to build end-to-end solutions that make a meaningful impact. I have extensive experience in analyzing and visualizing large datasets, helping businesses make data-driven decisions over the long-term.

In addition, my knowledge in cloud-based data solutions can be a valuable asset for implementing efficient and effective data management strategies in complex environments.

[download my CV as PDF](#)

## WORK EXPERIENCES

### Data Engineer / Data Scientist

- Building fraud detection algorithms and prototypes
- Setting up data infrastructure and pipelines
- Development and design of dashboards
- Identifying trends, generating insights and validating hypotheses

Quality & Liability Management |  
Deutsche Post | 2020 - Present |  
Cologne

### Automation Developer

- Estimating, designing, and developing robotics process automations (bots)
- DevOps for machine learning implementations
- Presenting applied digitization solutions at IT events

GBS Digitilization Programm |  
Deutsche Post | 2018 - 2020 |  
Cologne

## CERTIFICATES

Microsoft Certified Azure  
Data Engineer Associate  
(2023).

Google Cloud Professional  
Data Engineer (2022)

Professional Scrum Master  
(2019)

## SKILLS

Azure/Google Cloud

## BI Consultant / Data Analyst

Finance Operation & Controlling |  
Deutsche Post | 2014 - 2018 |  
Cologne

- Designing data warehouse architecture and ETL processes
- Automating, standardizing, and optimizing management reporting
- Analyzing financial data anomalies

## Data Analyst / IT-Project Manager

DHL Freight | 2011 - 2013 | Bonn

- Implementation of accounting and logistics data migration
- Operational and management reporting of logistics products

## PROJECTS

### Shipment theft ML prediction

2022-2023

The implemented machine learning solution provides early predictions of theft cases within parcel centers and during container transportations. Transportation and liability data are sourced from various data warehouse silos and systems. ML classification of fraud/non-fraud classes is based on several sub-task pipelines and features, such as clustering of customers, goods, value groups, NLP analyses of stolen goods descriptions, and other transportation metrics. The final prediction is carried out via an API call to DataRobot AutoML, where the trained model is located. I developed the end-to-end solution, which includes Python data engineering and AutoML modeling, with the assistance of business counterparts as for feature concepts and results validation. The daily predictions serve as the source for generation of security tickets, which are then used for further theft investigations by internal detectives.

### Cash-on-delivery anomaly detection

2022

The objective of the project was to develop a system that could identify fraudulent activities associated with cash-on-delivery shipments, thereby mitigating direct financial loss. My solution involved implementing an anomaly detection system that utilized rule-based detection logic embedded into Python code above SQL data warehouse pipelines. The system successfully identified regional sites that indicated fraudulent activities, enabling security detectives to take prompt action. Within the first three months of providing these data to security detectives, we witnessed the successful investigation of seven cases, which included both individual criminals and organized criminal groups.

### Liability scorecard of a company division

2021-2022

The aim of this project was to develop Tableau dashboards that could effectively visualize the company's liabilities pertaining to damage and missing shipments, with the goal of detecting

Python/Spark/SQL/

Tableau/SAP BW/PowerBI

Apache Airflow/Linux/Bash

Machine Learning

Anomaly Detection

AutoML Data Robot

Regression/Classification

NLP/Clustering/Deep  
Learning

CI/CD GitHub

JavaScript/HTML/CSS

OpenAI/ChatGPT API

## EDUCATION

Data Science DHL

Programm

Maastricht Open

Universiteit

2021 - 2021

Bachelor of Business

Administration

Berlin School of Economics

HWR

2008 - 2011

Master of Electrical

Engineering

Kyiv Polytechnic Institute

KPI

2002 - 2008

negative trends in liabilities by site, logistics process segment, and product. During the course of the project, I created a suite of dashboards that were fed by advanced SQL pipelines. One of the major accomplishments of this initiative was the creation of a common source of truth that was accessible to management and hundreds of internal users across the organization. This ensured that everyone had access to the same data and insights, thereby improving decision-making capabilities and enabling more effective measures to be taken to combat losses.

## LANGUAGES

German, English  
(Professional)

Ukrainian, Russian (Native)

## PERSONAL DATA

born in Ukraine, 1985

2 children

German citizenship

