



Mateusz Rafał Dalba

Machine Learning Engineer



Summary

- Senior Machine Learning Engineer, Data Scientist, and AI Consultant with 8+ years of commercial experience delivering production-grade AI, ML, Computer Vision, GenAI, and data platforms across healthcare, manufacturing, retail, energy, automotive, and SaaS. Experienced in end-to-end solution delivery: data engineering, model development, MLOps, cloud deployment, APIs, dashboards, LLM applications, and stakeholder-facing consulting.
- Strong background in Python, Databricks, Azure, PySpark, FastAPI, computer vision, LLMs, and classical machine learning. Operating primarily through B2B contracts and client-facing project engagements.



Experience

2025-06
- present

- Senior Machine Learning Engineer**
SoftServe - B2B Contract, Warsaw | Remote, Poland

Selected client engagements:

LEGO Group — Senior ML Engineer / Senior Data Scientist

- Designed and developed scalable Databricks data processing pipelines for commercial attribution and marketing analytics use cases.
- Built machine learning models for attribution and media mix modeling, including regression-based approaches and CatBoost models.
- Developed data drift monitoring and validation workflows to improve model reliability and production readiness.
- Worked with PySpark, Databricks Asset Bundles, Databricks Apps, Streamlit, FastAPI, Flask, and Python-based ML tooling.
- Collaborated with business and technical stakeholders to translate commercial questions into production-ready data science solutions.

AstraZeneca — Computer Vision Engineer

- Developed computer vision software for monitoring medical staff preparing for surgical procedures.
- Worked on human pose estimation, 2D/3D computer vision, object detection, tracking, and activity analysis.
- Integrated AI/ML components into backend services using Python, NumPy, OpenCV, FastAPI, and LLM-based tooling.
- Contributed to a healthcare-focused AI system requiring high reliability, interpretability, and robust visual analysis.

2024-02
- 2026-05

- AI Engineer**
Unikie - B2B / Project-based Cooperation, Warsaw, Poland

Delivered AI, computer vision, optimization, LLM, and data platform solutions for industrial and sports technology clients.



Personal Info

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Citizenship
Polish

GitHub
<https://github.com/mateuszdalba>

Website
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Skills

Machine Learning	★★★★★
GenAI / LLMs	★★★★★
Computer Vision	★★★★★
Software Engineering	★★★★★
Deep Learning	★★★★★
Data Science	★★★★★
Gradient Boosting	★★★★★



Software

Python	★★★★★
Databricks	★★★★★
Azure Cloud	★★★★★
Git	★★★★★
Web Development (Django, Flask, FastAPI, Streamlit, Dash)	★★★★★
Google Cloud Platform	★★★★★



Languages

English - C1

Polish - C2

German - B1

- Developed computer vision algorithms for automated glass quality inspection, including detection of defects, artifacts, cracks, and production irregularities.
- Designed and implemented optimization algorithms for glass placement and loading-table sorting, using genetic algorithms to improve manufacturing and loading efficiency.
- Built a real-time data analytics platform for monitoring glass processing data from hundreds of client-side installations worldwide.
- Developed Databricks and PySpark data pipelines on Azure, with dashboards and analytics layers using Apache Superset.
- Built a technical support chatbot using LLMs, RAG, OpenAI, Azure, and Django to automate customer support and technical inquiry handling.
- Developed computer vision software for monitoring tailgating and access-control violations in gyms and sports facilities.
- Worked across the full solution lifecycle: client requirements, data processing, algorithm design, model development, backend integration,

2022-03
- 2024-06

● Senior Machine Learning Engineer

AI Engineering Department - Accenture, Warsaw, Poland

- Executed ML projects across diverse clients and industries, encompassing Computer Vision, Classical ML, NLP, Time Series, and GenAI.
- Managed the full cycle of Data Science & Web Development using Python, complemented by cloud platforms: Azure, GCP, and AWS.
- Implemented best practices with tools such as GIT, Docker, Azure DevOps, Jira, and Confluence in an Agile environment.
- Played an instrumental role in technical recruitment by conducting interviews and assessing potential talent.

2023-05
- 2023-12

● Computer Vision Engineer

ZeroQS, Warsaw, Poland

Developed and implemented a bespoke Computer Vision algorithm from scratch, driving the core functionality of an intelligent shopping cart system.

2022-05
- 2024-05

● Data Science Bootcamp Tutor

Future Collars, Poland

Tutoried several intensive 3-month bootcamps, imparting hands-on knowledge in:

SQL; Python; Machine Learning; Computer Vision; Advanced Data Analytics

Conceived and hosted a range of AI/ML/Data Science webinars, such as a session on creating a virtual personal trainer using machine learning.

Link: <https://futurecollars.com/wydarzenia-fc/data-science-stworz-wirtualnego-trenera-personalnego-z-wykorzystaniem-uczenia-maszynowego/>

Authored and curated course materials from scratch, ensuring a comprehensive and up-to-date learning experience for participants.

2020-11
- 2022-03

● Data Scientist

Transition Technologies Science, Warsaw, Poland

Responsibilities:

- Execute ML projects in various industries (e.g. energy, medical, motorsport, fashion)
- Execute Image processing projects (e.g. detecting banknote for National

Bank of Poland)
- Perform data analysis, processing, visualisation and presentation
- Deploying API's and Dashboards
- Supervise small team of junior data scientists
- Regular meetings with clients

Technology stack:
Python, Jupyter Notebook, Spyder, VS Code, Git, Docker, Pandas,
Numpy, Sklearn, Matplotlib, Seaborn, Plotly, Tensorflow, Keras,
Statsmodels, Scipy, Dash, Streamlit and more...

2020-08
- 2020-10

● Junior Data Scientist

Transition Technologies Science, Warsaw, Polska

Intern in Research and Development department.

2019-01
- 2019-04

● Data Analyst Intern

EY (Data & Analytics)

An international AML project for European bank in Malta

2018-05
- 2018-12

● Junior Statistical Programmer

PAREXEL

Programming in SAS 4GL.



Education

2019-02
- 2022-09

● Advanced Analytics - Big Data, Master's Degree

Warsaw School of Economics, Warsaw, Polska

Master's thesis - Deep Learning poisoning with backdoor attacks

Additional activity: Data Scientist with SAS

2015-10
- 2018-10

● Quantitative Methods and Information Systems, Bachelor's Degree

Warsaw School of Economics , Warsaw, Polska

Bachelor's thesis: Modeling of tourism dynamics in Poland

Additional activity: Statistical Analytics with SAS



Projects

● AI Engineer — Project-based B2B Engagement

Staffbase | Remote

- Designed and implemented an evaluation pipeline for AI agents using Langfuse, OpenAI, and Azure ML Studio.
- Built tooling for tracking, evaluating, and improving LLM-based agent performance across test scenarios.
- Developed microservices for speech-based AI functionality, including text-to-speech and speech-to-text integrations.
- Supported production-oriented GenAI workflows with focus on observability, evaluation, and reliability.

2015-11
- 2016-11

● AIESEC - an international non-governmental not-for-profit organization



Certificates

- 2022-12 ● **ML Practitioner**
Dataiku
- 2021-09 ● **Data Scientist with SAS system**
SAS Institute
- 2019-11 ● **The Complete Machine Learning Course with Python**
Coursera
- 2019-10 ● **The Complete SQL Bootcamp**
Coursera
- 2019-05 ● **Python for Data Science and Machine Learning**
Coursera
- 2018-08 ● **Statistical Analyst with the SAS system (License no. M008/2018)**
SAS Institute
- 2022-01 ● **Business English Course - C1 (CEFR)**
Warsaw School of Economics
- 2018-01 ● **Business English Course - B2 (CEFR)**
Warsaw School of Economics
- 2018-01 ● **Business German Course - B1 (CEFR)**
Warsaw School of Economics