#### AI RESEARCHER / ENGINEER

# Jakub Strawa

## **PROFILE**

Research-focused AI/ML engineer specializing in multimodal models, and generative AI. Driven to learn, replicate, and extend state-of-the-art methods.

#### **EXPERIENCE**

#### AI ENGINEER, ROCHE - 06.2025-CURRENT

Co-developed a self-service platform for creating and deploying custom AI agents, and designed a multimodal retrieval-augmented generation (RAG) use-case to integrate text, image, and structured data for enhanced insights. (*Python, Azure, AWS, Llama-index*).

## AI ENGINEER / RESEARCHER, RAIFFEISEN BANK - 06.2024 - 05.2025

Automated invoice extraction (saving ~1,500 man-days/year) and KYC form review (equivalent to 10 FTEs annually) using Generative AI and fine-tuned Vision-Language Models; proposed and secured implementation of a graph-based org-chart extraction solution with GPT & Neo4j for RAG; built a data-driven summary tool for relationship managers to cut prep time. (*Python, Databricks, Azure, AWS, HuggingFace, LlamaIndex, PyTorch, LLMs*)

## AI ENGINEER, LINGARO - 05.2022 - 05.2024

Designed and optimized PySpark ETL pipelines on Databricks and Azure Data Factory –cutting job times by 50%; trained and deployed a YOLO-based dress-code analysis model; developed an action-recommendation and stock-optimization solution; partnered with stakeholders to propose and deliver tailored AI applications. (*Python*, *Databricks*, *Azure*, *AzureML*, *Scikit-learn*, *PySpark*, *Pandas*)

#### PYTHON DEVELOPER, DEOR - 11.2021-05.2022

Developed and optimized collaborative filtering algorithms for a pet-tech e-commerce platform—leveraging user behavior and transaction data to boost recommendation relevance; integrated these models into a Django REST API backend to deliver low-latency, high-performance services. (*Python, Django, Pandas, Docker, PostgreSQL*)

## **EDUCATION**

- Bachelor of Graphic Design, UITM Rzeszów (2020-2023) Thesis: Artificial Intelligence in Computer Graphics
- Engineer's Degree in Computer Science (expected 2027), WSB-NLU Nowy Sacz (2023-2027)

### **PUBLICATIONS**

• <u>Improving KAN with CDF Normalisation to Quantiles</u>. arXiv:2507.13393, 2025. Main author; co-authored with <u>Dr. Jarosław Duda</u>.

I also write technical blogs about AI. https://medium.com/@jakubstrawadev