# Alhamza IBRAHIM

AI/ML Engineer & Data Scientist

Darmstadt, Germany | +4915510781337 | alhamzaibrahimm@gmail.com | linkedin.com/in/alhamzzza

Experienced Data Scientist with a focus on Machine Learning, Computer Vision, NLP, and Generative AI. Strong background in Microsoft Azure. Fluent in English, Turkish, and Arabic, with a working proficiency in German.

#### EDUCATION

#### Technical University of Darmstadt

April 2024 - Present

M.Sc. in Computer Science - Informatik (AI)

Focus: AI, NLP, Deep Generative Models, Large Language Models, Database Systems

# Turkish German University

Sep. 2018 - July 2022

B.Sc. in Computer Science - GPA: 3.24/4.00

German Academic Exchange Service (DAAD) Scholarship Recipient

## PROFESSIONAL EXPERIENCE

#### **AI** Engineer

Jun. 2024 - Present

NTT Data B.S. Germany

Bielefeld, Germany (Part-Time)

- Architect and develop advanced RAG-based conversational chatbots for diverse industry applications
- Design and implement end-to-end AI solutions using Microsoft Azure and OpenAI services

#### **Data Scientist**

2022 - April 2024

NTT Data B.S. Türkiye

Istanbul, Turkey

- Led development of LLM-based solutions including intelligent agents and conversational systems
- Implemented core ML solutions across healthcare, finance, and retail domains
- Developed Computer Vision solutions using Azure Cognitive Services and CNN architectures

# TECHNICAL SKILLS

AI/ML: LLMs, RAG, Neural Networks, Computer Vision, NLP, Generative AI

Cloud & Tools: Microsoft Azure, Azure OpenAI, PromptFlow, Docker, Git, VS Code

**Programming:** Python, SQL, R, C++, MATLAB

Frameworks: LangChain, FastAPI, Flask, TensorFlow, PyTorch, Scikit-learn

Languages: English (Fluent), Turkish (Fluent), German (Working), Arabic (Native)

### CERTIFICATIONS

Microsoft Certified: Azure AI Engineer Associate | Azure Fundamentals | Azure AI Fundamentals

#### KEY PROJECTS

#### DeSi Restaurant Assistant

OpenAI, Azure, FastAPI

- Developed an intelligent chatbot for Ziehl Abegg's DeSi restaurant for natural dining inquiries
- Built an automated pipeline that triggers knowledge base updates whenever the menu changes

# Vavacars' VAVAbot

OpenAI, LangChain, FastAPI, Pinecone, Azure

- Built a modern car sales chatbot using RAG architecture, integrating Ada embeddings for semantic search and Pinecone for efficient data retrieval
- Improved query understanding with a custom BERT model for intent classification
- Created a flexible text-to-SQL agent that dynamically fetches vehicle information from the database

#### Virtual SAP Consultant

OpenAI, FastAPI, SAP, ABAP, Azure

- Developed an AI assistant that automates the creation of SAP technical documentation and ABAP code
- Fine-tuned GPT models with custom prompts to ensure consistent and accurate outputs
- Built and deployed a scalable API service on Azure, making the tool accessible across the organization