# ANDRII CHEKAROV

# Generative Al Solution | Python Full Stack Developer

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Hamburg, Germany

#### **SUMMARY**

Dynamic professional with over 8 years of experience in software development and web application engineering, expert in Python programming and full stack development.

Proficient in LLMs like GPT, Claude, Gemini, and BERT, as well as frameworks including LangChain, LangGraph, and AutoGen.

Utilized NLP models (spaCy, Hugging Face Transformers) for query expansion, document segmentation and categorization, and frameworks like Scikit-learn, and TensorFlow for applying various machine learning algorithms.

## **EXPERIENCE**

## Senior GenAl & Python Developer

11/2023 - 09/2024

#### **TechGlobe Solutions**

Dallas, Texas

- Developed a Report Generation Agent tailored for generating comprehensive reports with Faiss vector database and LangChain's ReAct agent.
- Applied query expansion to improve search engine results by adding additional terms or phrases to the original search query.
- Conducted hybrid search by combining keyword search based on the BM25 algorithm with vector search to retrieve more accurate and robust results.
- Achieved a 40% reduction in bug reports by implementing an agile testing framework during the development phase.
- Automated software deployment by implementing a CI/CD pipeline using Docker.

## Full Stack Developer

06/2022 - 08/2023

Luna Tech

Amsterdam, Netherlands

- Implemented best-practice FastAPI system architecture, user authentication (JWT, OAuth), modularization, and unit testing using pytest and mock.
- · Developed progressive web apps with React, enhancing mobile user engagement by more than 50%.
- · Designed and implemented a database system in PostgreSQL that optimized storage and retrieval operations by 35%.
- Integrated third-party services using RESTful APIs, which expanded the platform's capabilities and enriched the user experience.

# Python Developer

10/2021 - 03/2022

## QuinScape

Dortmund, Germany

- · Developed a robust content management system using Django, which successfully managed the workflow for a team of 20+ content creators.
- Implemented a new scoring algorithm for educational assessments that increased the accuracy of results by 15%.
- Performed extensive code reviews to enforce coding standards and improve application's security and scalability.

#### **EDUCATION**

Master's Degree in Computer Science 2019 - 2021

Hamburg University of Technology Hamburg, Germany

Bachelor's Degree in Computer Science 2015 - 2019

Hamburg University of Technology

Hamburg, Germany

#### LANGUAGES

English German Proficient Native



# **KEY ACHIEVEMENTS**

## implemented AI Chatbot with GraphRAG

Managed knowledge bases with Neo4j for a centralized knowledge graph to handle multi-hop questions.

# ★ Enhanced Progressive Web App User Engagement

My contributions to a progressive web app project led to a 50% increase in mobile user engagement.

# ✓ Optimized Database System

Led the database optimization project with PostgreSQL, resulting in a 35% performance boost.

## Quality Assurance Improvement

Achieved 40% reduction in bug reports with agile testing framework.

#### **SKILLS**

LLM, LangChain, Python, FastAPI, Django, React, Next.js, PostgreSQL, Docker