# Honggang Yan

Two STEM Degrees | Data-Driven Professional

Frankfurt am Main | honggang.ds@gmail.com | +49-152-3162-3135



#### **Education**

### Frankfurt School of Finance&Management | MSc in Applied Data Science

Sept. 2022 - August. 2024

• GPA: 1.5 | Coursework: Machine Learning, Databases and Cloud Computing, Artificial Intelligence, NLP

# Shanghai University | MSc in Civil Engineering

Sept. 2015 - April. 2018

• GPA: 87.45/100 | Published Paper: Breakthrough Test on Preferential Flow in Municipal Solid Waste (indexed by EI)

## Yancheng Institute of Technology | BSc in Civil Engineering

Sept. 2011 - May. 2015

• GPA: 3.21/4 | Outstanding Graduate Award

## **Professional Experience**

#### Lufthansa Group | Advanced Analytics and AI Team

Frankfurt am Main

Data Science Intern Dec. 2023 - Jun. 2024

- Developed a Retrieval-Augmented Generation (RAG) application to improve customer Q&A experience
- Designed the solution architecture for RAG on Azure integrating LLMs, embedding models and vector databases
- Established a framework to evaluate RAG performance using "LLM as a Judge" and "Human in the Loop"
- Completed the POC of an Audio Classification App using LLMs to reduce manual effort
- Researched methodologies for prompt engineering, BM25 and vector search.
- Practical experience in Git version control, CI/CD and Docker
- Worked in an Agile Team, following the SCRUM Framework

#### Lufthansa Group | Data Delivery Team

Frankfurt am Main

Data Engineering Intern

Jul. 2023 - Dec. 2023

- Deployed a Power BI budget management report for 20+ colleagues, improving vendor and budget management
- Developed an ETL pipeline and Tableau dashboard to monitor tasks on Jira using Azure Data Factory and Databricks notebook, improving the transparency of project management for the team
- Curated 50+ airline customer data table schemas in Azure Purview, enhancing data quality and governance
- Tested and validated weekly Samba delta data loads to ensure timely and accurate data warehouse updates
- Developed and facilitated an onboarding process, ensuring a seamless experience for new team members

China Jinmao Ningbo, China

Investment Manager Mar. 2020 - Apr. 2022

- Led equity acquisitions for two residential projects, generating over €1.39 billion in revenue
- Promoted to Investment Manager and received a Special Contribution Bonus in 2021
- Conducted 8 feasibility studies and investment analyses for residential projects. Presented to stakeholders and participated in land-bidding events
- Collaborating with the marketing, design, cost, finance, operations, and engineering departments to complete each investment report in a month, showcasing effective cross-functional communication and leadership

#### **Zhongliang Holdings Group**

Hangzhou, China

Investment Analyst May. 2018 - Mar. 2020

- Completed 12 feasibility studies for potential investment projects
- Developed and implemented SOPs for the investment department and the subsidiary investment teams

## **Technologies**

Programming: Python, SQL, HTML, CSS, JavaScript, Django

DevOps: Azure DevOps, VScode, Git, CI/CD (GitLab, GitHub Actions), Docker

Cloud Technologies: Azure AI/ML Studio, Azure AI Search, OpenAI services, Azure Data Factory

BI Tools: Power BI, Tableau, Jira, Miro, Sharepoint, Microsoft Office

## **Company Projects**

#### Nagarro | Airline Customer Review Analysis

Oct. 2023 - Jan. 2024

- Completed a business intelligence project analyzing over 20,000 customer reviews from five European airlines using large language models (LLMs)
- Developed a sentiment analysis and topic modeling framework utilizing sentence embeddings, clustering, TF-IDF and LLaMA2
- Created an interactive Tableau dashboard to visualize key insights from the customer feedback analysis

#### Emma - The sleep company | LLM-Based E-mail Campaign Analysis

Aug. 2023 - Sept. 2023

- Completed a project leveraging NLP to analyze campaign emails and conversion rates
- Applied embedding techniques and similarity scoring to quantify abstract business challenges
- Conducted feature engineering and OLS regression to uncover key relationships between KPIs and email content

## **Extracurricular Activities**

Languages: English (C-level), German (A2, currently learning at the Goethe Institute), Chinese

Volunteer Work: 2024 European Cup, 2023 Lufthansa Culture Event, 2017 Shanghai Jazz Music Festival

Sports: Half-marathon finisher, Regular swimmer and cyclist