

MUHAMMAD SHAFIQ BIN BAZALANUL AZAM

M.Sc Data Science Final Year Student

Nuremberg, Bavaria

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Motivated Data Science Master's student with corporate experience, strong analytical and critical thinking skills. Skilled in data analysis, machine learning, and programming to drive insights and informed decision-making. Committed to continuous learning and professional growth.

Work Experience

Master Thesis

Siemens | Munich

Sep 2024 - Present

Working in the research and predevelopment team by developing methods to utilize generative AI for the Siemens' Industrial Copilot to boost users' and customers' productivity.

- Conduct **research on an unexplored problem** on generating Sequential Function Charts (SFCs) using generative AI techniques.
- Develop a specialized **SFC dataset** tailored for state-of-the-art generative models
- Generate SFCs conditioned on textual user intents and existing sequences, leveraging **Large Language Models (LLMs)** and **graph generative models** like (Vector Quantized) Variational Graph Autoencoder
- Design **experiments and test hypotheses** statistically to improve model performance

Working Student

Siemens | Nuremberg

May 2023 - Aug 2024

Working student in the logistics department for Siemens' factory automation product spectrum manufactured in Germany and China. Core tasks relate to automation, database migration and monitoring.

- Design an **end-to-end automation workflow** for recurring tasks using Knime, improving 95% of employees' productivity
- Coordinate **innovative initiatives** and **database migration** from Access to SQL, **improving data querying time by 50%**
- Construct a **PowerBI dashboard** for department and product managers to monitor all products in the team's portfolio

Intern and Bachelor Thesis

Mercedes-Benz | Stuttgart

Mar 2022 - Feb 2023

Intern and Bachelor Thesis for the department of the Mercedes Benz European customer database. Close cooperation with product managers, product owners, solution architects, integration partners and external consultants.

- Propose a **data quality management framework** for continuous data quality monitoring in the **European customer database and the CRM system** and creating a **Grafana dashboard** as a Proof of Concept
- Align the **weekly meetings** such as user stories refinement meetings with an average of **100 international participants** from consultants, managers and developers
- Facilitate external source systems to integrate with Mercedes' API specification for their European customer database

Education

FAU Erlangen Nuremberg

Master of Science | Data Science, German Grade: 1.8

Expected Graduation: March 2025

Fachhochschule Aachen

Bachelor of Science | Computer Science, German Grade: 1.3

Sep 2019 - Feb 2023

Leadership

Member of IT and Media Department
Malaysian-German Student's Society

Feb 2021 - Jan 2022

Involvement in the Malaysian community in Germany to connect Malaysians abroad.

- Committee of Virtual Career Fair in collaboration with TalentCorp Malaysia with participation of around 100 students, inviting renowned companies such as Intel, B. Braun, ExxonMobil and Top Glove
- Head of Media of the annual Malaysian Games, which was participated by 300 students

Core Skills

Programming: Python, JavaScript, React, VBA

Artificial Intelligence: Generative AI, Graph-based Machine Learning, Deep Learning, Statistics, LLM (OpenAI), PyTorch

Data Analysis and Statistics: Statistical Analysis, Experimentation, Data Wrangling

Databases: SQL, Database Architecture, Data Management, Data Quality, ETL

Reporting: PowerBI, Grafana

Automation and Tools: Knime, Microsoft Office, Git

Others: Requirements Engineering, Project Management, Linux

Languages

English (fluent), German (fluent), Malay (native)

Awards

Ehrenplakette der FH Aachen
Fachhochschule Aachen

Dec 2023

The receiver of the badge of honour from Fachhochschule Aachen for impressive academic achievements among the students from the whole university

VDE Preis Aachen
VDE

Jan 2023

One of the six receivers of the VDE Preis Aachen from Fachhochschule Aachen and RWTH Aachen for outstanding academic achievements and extracurricular involvements

Dean's List
Fachhochschule Aachen

2020 - 2023

Dean's List receiver from Fachhochschule Aachen for three consecutive years

Yayasan Telekom Malaysia Scholarship Award
Telekom Malaysia

2017 - 2023

Receiver of the Yayasan Telekom Malaysia Future Leader scholarship award to pursue further education in Germany

Interests

Sports (Football, Badminton), Reading (Economics, World)