NAHIN HOSSAIN UDAY

DATA ANALYST & DATA SCIENTIST

Forward-thinking data analyst skilled in translating complex client data into a scalable ML solution for optimisation. Expertise in statistical modelling, clustering and predictive algorithms, with hands-on experience in web application development, ETL pipeline design and interactive dashboards. Proven ability to drive R&D initiatives and automate processes to generate rapid and transparent data insights.
To learn more, please visit my website at Nahin (click to open).
Objective: Looking for Data analysis or Data science related roles.

WORK EXPERIENCES

09/2024 – Present **Research Assistant | University of Wuppertal**

- Assisted in analysing and managing large datasets with DuckDB for academic research on road networks.
- Applied statistical methods using R, then visualised the data to present research findings.
- Developed a web module as a user interface for better interactive visualisation using Python Flask and React JS.
- The web app helps users plan travel to a destination in Germany by providing statistical information graphically.

05/2023 – 10/2023 **Data Scientist (Work Student) | Aptiv**

- Extracted and transformed GPS data from YAML and Pickle files using Python scripts.
- Designed and implemented a PostgreSQL database schema for storing data in a structured way.
- Created a map generation tool to visualise location data using Folium.
- Build a Python Django backend and React JS frontend to display map data via a web interface.
- The system uses sensor data to determine the travel path.

EDUCATION

10/2022 – Present **Computer Simulation in Science | University of Wuppertal**

- **GPA 3.2 with expertise in parallel programming and simulation.**
- **Hands-on projects on Neural Network and Mathematical models.**

01/2017 – 10/2023 **Computer Science and Engineering | American International University Bangladesh**

- **CGPA 1.8 (German grading system)**
- **Learnt basic computer science topics like Data Structure, Algorithms, Data Mining and AI.**

TECHNICAL SKILLS

- **Programming languages:** C++, Python, Golang, Matlab.
- **Python libraries:** Numpy, Pandas, Scipy, Scikit-learn, TensorFlow, PyTorch.
- **Statistical models:** Regression, Clustering (K-means, hierarchical), time-series forecasting, evaluation metrics.
- **Database management:** MySQL, PostgreSQL, Oracle, DuckDB.
- **Data visualisation:** Matplotlib, Tableau, Django-React based application
- **Operating system:** Linux, Windows.
- **Tools and version control:** Docker, Git, CI/CD pipeline.

CONTACT

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LINKEDIN: https://www.linkedin.com/in/muhammad-nahin-hussain-uday-028ab9193/

GITHUB: https://github.com/NH-Uday

LANGUAGE SKILLS

Deutsch:	A2 (B1 in progress)
English:	C1
Bengali:	Native

CERTIFICATES

Introduction to Big Data	Coursera
Neural Network and Deep Learning	Coursera
Internet of Things	AIUB Continuing Education Center

HOBBIES

Reading, Traveling, Football, Computer Games

REFERENCE

Stefan Becker,

ASUX team manager at Aptiv

Email: becker.stefan@aptiv.com

PROJECTS

- **Road Simulator** (2025): Used geological data for the calculation and optimisation travelling time for German highways.
  Tools and Skills: Python, DuckDB, R and React JS.

  Project link: https://github.com/NH-Uday/Roadsimulator

- **FNN for Text Recognition** (2023): Developed a complete Feedforward Neural Network for text recognition.
  Tools and Skills: Matlab, AI, Neural Network.

  Project link: https://github.com/NH-Uday/Feed-Forward-Neural-Network-for-Text-Recognition

- **Chatbot** (2025): It is a ChatGPT based chatbot to help students in the CFD lab.
  Tools and Skills: Python, Node JS, Typescript and Next JS.

. Project link: https://github.com/NH-Uday/Chatbot

RESEARCH EXPERIENCE

2019-2020 **From Nature to UAV – A Study on Collision Avoidance in Bee Congregation.**

DOI: *https://doi.org/10.5815/ijisa.2024.03.06*

- Collected and annotated video data of flying bees
- Applied a statistical model to understand the collision avoidance behaviour of a bee swarm.
- Worked with the Swarm Intelligence algorithm to propose a collision avoidance model for UAV swarm.