# NASRUL HUDA

MSc Data Science and Artificial Intelligence

# PROFESSIONAL SUMMARY

Aspiring Data Scientist and AI Engineer with a strong foundation in statistics, machine learning, and modern data technologies. Maths enthusiast committed to translating complex problems into clear, actionable insights. Passionate about building robust, scalable systems and continuously exploring new tools and methods. Also engaged in freelancing, delivering practical, well-designed solutions tailored to client needs.

## **EDUCATION**

#### University of Hamburg

Jamia Millia Islamia

Hamburg, Germany

Master of Science in Data Science and Artificial Intelligence - Grade - 1,8

Oct 2024 - Present New Delhi, India

Bachelor of Technology in Computer Science Engineering Grade - 1,6

Oct 2020 - Jun 2024

EXPERIENCE

# University of Hamburg - Security and Distributed Systems Research Group

Hamburg, Germany

Student Research Assistant

June 2025 - Present, Part Time

• Developing Python-based tools and applications for research data management and security analysis, implementing algorithms for distributed network systems.

- Contributing to the NFDIxCS (National Research Data Infrastructure for Computer Science) project, collaborating on interdisciplinary projects involving AI and data science methodologies.
- Technical Skills: Python Development, Research Methodology, Cybersecurity, Network Security, Distributed Systems, Docker, Git

#### University of Hamburg - Language Technology Research Group

Hamburg, Germany

Project Student Assistant

Feb 2025 - May 2025, Part Time

- Contributed to the development of the DATS Project (Discourse Analysis Tool Suite), an advanced NLP platform for automated text analysis and discourse processing, implementing key features and functionality enhancements.
- Developed and maintained full-stack components including React TypeScript frontend interfaces and FastAPI backend services, implementing RESTful APIs and database integrations for improved system performance and user experience.
- Implemented NLP processing modules, text preprocessing pipelines, and data analysis algorithms, working with machine learning frameworks to handle large-scale linguistic datasets and generate meaningful insights.
- Technical Skills: Natural Language Processing, Machine Learning, React TypeScript, FastAPI, Python, RESTful APIs, Database Integration, Docker, Git, Agile Development, Text Analytics, Data Processing

#### Adtech Media Solutions

New Delhi, India

Data Analyst Intern

Feb 2023 - Nov 2023

- Conducted Market research, analyzed data to develop insights and marketing strategies and generated reports on key metrics for clients.
- Created interactive dashboards and data visualizations to present complex analytical findings to clients and support data-driven decision making.
- Technical Skills: Python, Pandas, Tableau, Jupyter, Github, Git

#### Maseehum Task Manager Private Limited (mTm)

New Delhi, India

Web Developer

Apr 2023 - Oct 2023

- Developed and designed the complete full-stack website for a fintech hardware distribution company specializing in biometric devices, POS terminals, and payment systems serving 500+ retailers nationwide.
- Built responsive web interfaces showcasing product catalogs for electronic and fintech hardware including Mantra/Morpho biometric scanners, Android POS terminals, and thermal receipt printers.
- Technical Skills: React TypeScript, Flask, Full-Stack Development, E-commerce Integration, Responsive Design, RESTful APIs, Git, GitHub

#### **National Informatics Center**

New Delhi, India

Data Analyst Intern

May 2022 - July 2022

- Scraped data from Indian Govt. Services Portal, organized it into CSV files, performed visualizations, manipulations, etc.
- Technical Skills: Python, Pandas, BeautifulSoup4, Seaborn, Matplotlib

GitGood O | Python, GitHub API, OAuth, Machine Learning, Web Development

- Built a comprehensive web application that integrates with GitHub via OAuth to analyze and visualize repository data, commit history, and code differences.
- Integrated AI-powered chat assistant using custom RAG system to answer contextual questions about code changes and repository evolution.

MyTorch () | Python, NumPy, Deep Learning, Neural Networks

- Developed a minimal deep learning library inspired by PyTorch, implementing fundamental neural network operations using only NumPy as the Python library dependency, building everything from scratch with fully connected linear layers for educational and prototyping purposes.
- Built core functionalities including forward and backward propagation, gradient computation, and optimization algorithms to facilitate understanding of deep learning fundamentals.

Taxibee 🗘 | TypeScript, Material UI, React, Google Cloud, Docker, FastAPI, Apache Kafka, MySQL

- Engineered a real-time data management web application for taxi companies, featuring comprehensive dashboards for monitoring driver performance and operational metrics.
- Implemented live streaming capabilities for order and transaction data processing, enabling real-time tracking of business operations and customer interactions.
- Developed automated revenue calculation and driver payout management systems with live analytics to optimize financial operations and driver compensation.

Momentum (WIP) ( Web Scraping, Content Analysis, Research Tools, Machine Learning, Python

- Developing a research assistant web application inspired by Anara Labs' Anara, designed to streamline academic and technical research workflows.
- Building automated web content extraction and organization systems to gather, process, and categorize research materials from multiple online sources.
- Implementing intelligent summarization algorithms to condense and present research findings in structured, actionable formats for enhanced productivity.

#### TECHNICAL SKILLS

Languages: Python, C++, TypeScript, Javascript, GoLang, SQL

Relevant courses: Machine Learning, Data Analytics, Natural Language Processing, Data Structures & Algorithms, Databases and Information Systems, Statistical Signal Processing, Language Technology, Computer Vision, Neural Networks

**Technologies :** PyTorch, Scikit-Learn, Pandas, MySQL, PostgreSQL, Langchain, Docker, Tableau, Seaborn, FastAPI, React, NodeJs, Github Actions, Selenium, Google Cloud, BeautifulSoup4, Apache Kafka, Git, Tailwind Css, MS Office

# LANGUAGES

English: C1 (Advanced) | Hindi: Native | Urdu: Native | German: A2 (Elementary)

## AWARDS & ACHIEVEMENTS

Letter of Excellence and Acknowledgment, Received from the Vice Chancellor of Jamia Millia Islamia. IELTS 8.0 Band CEFR C1. 9-Reading, 8-Listening, 7.5-Writing, 7.0-Speaking

Achieved 1st Rank in the university for the 4th year of Bachelors (2024).