Mohammad Tanzil Alam

Data Engineer

Nationality: Indian

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Education

Jacobs University Bremen

Data Engineering
GPA 2.1 (1 being the highest)

September 2021 – August 2023

Master of Science (MSc)

- **Thesis:** Detecting Data Drifts in a clinical NLP pipeline.
- Courses: Data Analytics | Probability | Machine Learning | Data Mining | Statistical Modeling | Data Management with Python & SQL

Uttarakhand Technical University

Computer Science & Engineering GPA: 3.0 (1 being the highest)

August 2015 – July 2019 Bachelor of Technology (B. Tech)

- **Thesis:** Online Web application development for the Kids Regio website.
- Courses: Artificial Intelligence | Data Structure using C | The Theory of Automata | Database Management System | Data Warehousing & Mining | Design & Analysis of Algorithms

The four-year program included theoretical and practical modules.

Experience

Roche Diagnostics, Penzberg, Germany (1 year)

June 2022 – July 2023 Penzberg, Germany

Apprentice Data Engineer + Master Thesis

- Completed Master thesis (Detecting Data Drifts in a clinical NLP pipeline) in 6 months and internship (Guideline Digitalisation JSON Backend) in 3 months.
- Streamlined GitLab PDF text data extraction with modern DevOps using Git API, established an AWS ETL cloud pipeline using Glue, PySpark, S3, and Athena for seamless integration, processing, and querying in a cloud-native environment.
- Implemented end-to-end OCR document processing using advanced NLP techniques and automated pipelines (an application), employing state-of-the-art word embeddings and cosine similarity for real-time data drift detection in a test dataset.
- Collaborated with project managers, project engineers, and project control personnel to support ongoing projects.

Fortress6 Technologies (2 years)

June 2019 - May 2021

Senior Web Application Developer (13 months)

Kolkata, India

- Led 80% of database development which includes optimizing performance, ensuring data integrity, and implementing robust security measures for 100% scalable solutions.
- Collaborated with diagnostic and service teams to ensure content adhered to standards and systems engineering principles.
- Transcribed diagnostic information and procedures into proprietary software, aligning with systems engineering frameworks.
- Organized technical information on subject matter content. Effectively communicate complex technical content to high-end customers.

Junior Web Application Developer (10 months)

- Assisted in database development and maintenance, actively involved in 50% of SQL-based design, querying, and data upkeep.
- Under the mentorship of experienced professionals, embraced the latest technologies like TYPO3 CMS, collaborated in 80% of team efforts, documenting and testing the proper running of the database.
- Worked in the product lifecycle from ideation, user research, and gathering requirements, to launch readiness.
- Developed refined solutions to ensure customer, operational, and technology requirements for query resolution.
- Detailed-oriented and organized, with an ability to demonstrate developing written and verbal presentation skills.
- Experience and knowledge working in Agile methodology.

Languages

German (B1) English (C1) Urdu/ Hindi (Native)

Skills

Technologies

Python, Java, C, C++, R, Docker, AWS, Power BI, MySQL, CI/CD Git, Bitbucket, Kanban, HTML, Blender 3D, MS office

Tools

Jupyter Notebook, R Studio, NetBeans, Visual Studio

Operating System

Linux, Windows, Mac
Communication and
Presentation skills,
Problem Solving Skills,
Technical Leadership,
Data-Driven Decision

Soft Skills

Technical Leadership,
Data-Driven Decision
Making, Team Player, Fast
Learner, Attention to
detail, Collaborative,
Cooperative, Contributive,
Decision Making,
Enthusiastic, Proficient,
Analytical Thinker,
Timely, Requirement
Analysis, Content
Management, Quality
Analysis/Check

Awards

- \cdot Received 100% Scholarship for Master's Education
- · Awarded 1st position for an IoT project in a Tech fest during Bachelor education
- $\cdot \ {\bf Participated\ in\ Science\ Olympiad\ Competition}$