# Reema Dass

## Data Scientist | Data Engineer | Data Analyst

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<u>LinkedIn</u> <u>GitHub</u> <u>Website</u>

Data Scientist with 4+ years of experience in machine learning, cloud infrastructure, and data engineering. Known for building scalable systems and extracting actionable insights that drive business value. Strong background in Azure and AWS platforms, with hands-on experience in both academic research and industry-grade applications. Passionate about solving real-world problems through AI and data-driven solutions..

#### **Education:**

## Masters in Data Science at Technical University of Vienna, Vienna Mar 2022 – Sept 2025

• Majoring in Machine Learning and Visual Analytics.

#### **Bachelors in Computer Science at VTU, India**

Sep 2013 - Dec 2017

Thesis Topic: Image processing for a medical university for disease diagnosis.

## **Experience:**

#### Research & Prototype Developer at **Backbone.one**, **Vienna**

Jan 2025 - Present

- Prototyping C#-based solutions with Azure services for energy analytics
- Implementing Microsoft Azure Document Intelligence solutions.
- Building scalable prototypes for future energy service integrations

#### <u>Data Science Research Internship (FFG-Femtech) at SBA Research, Vienna</u> Sep 2023 - Feb 2024

- Investigated security upgrades for edge-deployed Deep Neural Networks (DNNs), and proposed an alternative obfuscation method that reduced vulnerability risk by 10% through ethical attacks on the deployed model.
- Evaluated Trusted Execution Environments (TEEs) and encryption methods to validate and improve data security.
- Implemented improved obfuscation methods, reducing the chance of reverse engineering by 25% and considerably increasing the security of DNN model deployment.

#### Software Developer at **Nextpart, Linz**

Nov 2022 - Jul 2023

- Integrated three new features into a malicious analysis tool, improving threat detection accuracy by 20%. Developed Python logic to categorize threats as Malicious, Benign, Suspicious, or Unknown.
- Added external software connectors to the tool's architecture, enhancing its ability
  to identify and evaluate security issues by 30%, with internal decisions influenced
  by external integrations.
- Conducted vulnerability testing to uncover and address logic flaws, resulting in increased overall system resilience.



- Developed and executed data redaction and anonymization solutions for Personally Identifiable Information (PII), reducing exposure by 85% and enhancing compliance with data privacy regulations.
- Engineered and optimized data processing pipelines using AWS Fargate, achieving a 30% increase in processing speed and a 20% reduction in operational costs.
- Collaborated with over five cross-functional teams to ensure adherence to data privacy standards, resulting in a 95% compliance rate and mitigating legal risks.

## Data Engineer at Stats Perform, India

Mar 2020 - Jul 2021

- Led the cleaning, processing, and analysis of extensive datasets for sports analytics, managing over 10 terabytes of data and improving accuracy by 50% using AWS Glue, AWS Crawler, Spark scripting, Redshift, and DynamoDB.
- Integrated AWS platforms with external APIs to enhance data pipeline scalability by 60% and reduce data retrieval times by 35%. Applied data storage solutions on S3 Glacier for auditing.
- Developed a self-sustaining Cloud ETL pipeline capable of handling dynamic loads, resulting in a 45% increase in system resilience and a 25% reduction in downtime.

## Full stack Developer at Infosys Private Ltd, India

Dec 2018 - Feb 2020

- Led full-stack development for Belgium Post, focusing on enhancing data storage and retrieval operations. Achieved a 50% reduction in query response times and a 40% improvement in storage efficiency using backend technologies such as Azure Blob Storage, SQL for data tracing, C#, and RESTful APIs.
- Directed Angular UI development, incorporating features like language flexibility and dynamic functionality to enhance user experience and accessibility.

## **Skills:**

- Programming Languages: Python (Pandas, NumPy), R, SQL.
- Machine Learning & Statistical Analysis: TensorFlow, scikit-learn, PyTorch, Keras, Random Forests, SVM, Gradient Boosting, Time Series Analysis, Hypothesis Testing.
- Data Management & Processing: Hadoop, Spark, Kafka, MongoDB, Redshift, S3.
- Data Visualization & BI Tools: Tableau, Power BI, Excel, ggplot2, Matplotlib, Plotly.
- Cloud Platforms: AWS (S3, Glue, EMR), Azure (Data Factory, Machine Learning, Document Intelligence, TimeScale DB).
- Containerization & Orchestration: Docker, Kubernetes.

#### **Certificates:**

Technical Certifications	Language Certificates
AWS Cloud Practitioner	English: C1
■ Microsoft Azure Developer Associate	German: B1

AI-900: Microsoft Azure AI Fundamentals (2025)	
■ DP-900: Microsoft Azure Data Fundamentals(2025)	

## **Projects:**

#### Poetic Patterns:

- Tools: Pandas, numpy, Scikit-learn, Matplotlib, Seaborn, LLM, BERT, Sentimental analysis. Testing Identity theft:
- Tools: Transfer Learning, Record Linkage, Differential Privacy, ARX Data Anonymization.
- Ethical Record Linkage Attack.

## Reinforcement Learning-Based Breakout Game

• Tools: Tuning rewards and penalty, Pygame for Game design, Evaluated over thousands of iterations.

## Sentiment Analysis based on Twitter feeds:

• Tools: NLP Models, BERT, GPT, Tableau, NLTK.

#### Influenza Prediction:

• Tools: Pandas, numpy, Scikit-learn, Matplotlib, Seaborn.