Rakat Murshed

Research Assistant · Machine Learning · Data Analysis

Frankfurt am Main, Germany
+49 1522 1545155
rakatmurshed13@gmail.com
rakat-murshed-57b249236
Rakat-3

Profile

Dynamic and analytical Research Assistant at the **Max Planck Institute for Empirical Aesthetics**, focusing on machine learning for cognitive and aesthetic data. Experienced in Python, MATLAB, and cloud computing with strong interest in applied AI and data-driven research. Passionate about transforming complex datasets into meaningful scientific insights.

Experience

Jul 2024 – Present — **Research Assistant**, *Max Planck Institute for Empirical Aesthetics*, Frankfurt am Main, Germany

- Develop machine learning and deep learning models to analyze aesthetic and emotional responses.
- Implement computer-vision and data-processing pipelines for large image/video datasets.
- Conduct data preprocessing, feature extraction, and model optimization using Python and MATLAB in HPC/Linux environments.
- Automate ETL workflows and analysis scripts for reproducible experiments.
- Collaborate with interdisciplinary teams of psychologists and engineers to integrate ML in perception studies.

Education

2024 – Present — **M.Eng. in Information Technology**, *Frankfurt University of Applied Sciences*, Frankfurt, Germany
Focus: Machine Learning, Cloud Computing, IT Security

2016 – 2020 — **B.Sc. in Electrical & Electronic Engineering**, *North Western University*, Khulna, Bangladesh
CGPA: 3.96/4.00 · Thesis: Multiplex Blind Helper Device and Renewable Energy in Bangladesh

Selected Projects

Blind Helper Device — Ultrasonic + AI navigation system assisting visually impaired users.

Laptop Price Predictor — ML regression app using Streamlit to predict laptop prices from specifications.

Movie Recommendation System — Personalized movie suggestions using TMDb data, NLP, and Scikit-learn.

SMS Spam Classifier — Spam detection system using supervised ML models and evaluation metrics.

Technical Skills

Programming	Python, MATLAB, SQL
Machine Learning	Scikit-learn, TensorFlow, Keras, PyTorch
Cloud & IT	Azure, Cloud Computing, IT Infrastructure, Security
Operating Systems	Linux (Advanced), Windows (Professional)
Tools	Streamlit, Git, Microsoft Excel & PowerPoint
Languages	English (B2), Bangla (Native), Deutsch (B1)

Certifications & Awards

2023 — **Machine Learning with Python** – IBM (Coursera)

2023 — **Data Analysis with Python** – IBM (Coursera)

2017 **Techkriti Award**, IIT Kanpur – Recognized for technical innovation.