AYUSH JUYAL

M.SC. DATA SCIENCE | ML & NLP | DEPLOYED ML APPLICATIONS

Braunschweig, Germany | aayushjuyal0@gmail.com | portfolio: ayush009.github.io/ayushjuyal.dev

M.Sc. Data Science student with practical experience in NLP, Machine Learning, and model deployment. Skilled in developing explainable AI models and end-to-end ML applications. Motivated Data Science student skilled in NLP, ML, and explainable AI, seeking to apply technical and analytical skills to impactful healthcare or AI-driven projects.

TECHNICAL SKILLS

- **Languages:** Python, SQL, Java, C#
- **Libraries/Tools:** Scikit-learn, Pandas, NumPy, Streamlit, SHAP, Grad-CAM, Git, Pytorch, TensorFlow
- **Concepts:** NLP, Explainable AI, Predictive Modeling, Feature Engineering, EDA
- **Others:** Tableau, AWS (Basics), Agile (Scrum, Jira)

EDUCATION

M.Sc. in Data Science **Oct 2023 - Sep 2026**
Technische Universität Braunschweig, Germany

B.Tech. in Computer Science and Engineering **July 2016 - June 2020**
Specialization: Big Data Analytics
Graphic Era University, India

PROJECTS

DriveWorth – Used Car Price Prediction (Full ML App)

- Trained & optimized Random Forest, XGBoost, and CatBoost models (R^2 = 0.91).
- Added logic for ownership-based pricing and SHAP explainability.
- Deployed a polished Streamlit app with real-time INR–EUR conversion.

NLP Classifier App

- Built and deployed text classification app using Python & Streamlit.
- Boosted NLP model accuracy using refined vectorization techniques and tuned ML pipelines.

Explainable AI Models for Image Classification

- Implemented Grad-CAM & RISE visualizations for interpretability in DL models.

PROFESSIONAL EXPERIENCE

Programmer Analyst Trainee, Cognizant Technology Solutions **Jul 2020 – Jan 2021**

- Optimized large-scale SQL queries, improving backend runtime by 30%.
- Supported database operations and automation for a US-based telecom client.
- Collaborated on .NET (C#) and React projects, strengthening debugging and teamwork skills.

PUBLICATION

- Co-author: "**Predicting and Enhancing Cryptocurrency Fluctuations using ML**", IJARESM, 2023.
  Implemented ML/DL models (LSTM, Random Forest, SVR) for crypto price prediction.

ADDITIONAL INFORMATION

- **Languages:** English (Fluent), German (A2 → B1 in progress)
- **Work Authorization:** Eligible to work 20 hrs/week in Germany
- **Volunteering:** Taught autistic children (AIESEC China) fostering education & social impact