

Madhumita Khatua

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PROFESSIONAL SUMMARY

BCA Computer Applications student with hands-on experience in Python, data analysis, supervised machine learning, frontend development and AI applications. Currently working as a Machine Learning Intern and building practical projects using Python, Pandas, NumPy and Scikit-learn. Interested in AI/ML, data analytics and AI application development.

TECHNICAL SKILLS

Programming: Python, Java, PHP

Machine Learning & AI: Supervised Learning, Classification, Model Evaluation, Data Preprocessing, AI Applications

Python Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn

Web Development: ReactJS, Frontend Development, HTML/CSS, PHP

Database: SQL, DBMS, MySQL, MongoDB

Tools: Git, GitHub, Jupyter Notebook

EXPERIENCE

Machine Learning Intern — Valentius Kryptix | Sep 2026 – Present

Working on machine learning tasks and internship assignments involving practical ML workflows. Applying Python-based data preprocessing, model development and evaluation concepts through project work.

PROJECTS

[FeatureSelect-ExplainLab](#) | Main Project

Explores feature selection and model explainability by comparing SHAP, feature importance and RFECV methods.

ML Classification Model Arena | Python, Pandas, NumPy, Scikit-learn

Compared Logistic Regression, Decision Tree, KNN, SVM and Gaussian Naive Bayes on the Titanic dataset using a consistent preprocessing pipeline. KNN achieved 81.56% accuracy and 74.42% F1-score.

Doctor Appointment Booking System | PHP, MySQL

Built a database-driven application for managing doctor and patient appointment information.

Additional ML projects: [ClusterLens](#) | [MetricForge](#) | [ML-Model-Comparison-Suite](#) | [EnsembleBench-Churn](#) | [HyperTune-SearchLab](#)

BLOG & TECHNICAL WRITING

- [How to Perform Feature Selection in Machine Learning – Comparing SHAP, Feature Importance and RFECV](#)
- [Finding the Best Supervised and Unsupervised Machine Learning Models](#)
- [Supervised Learning: Comparing 5 Machine Learning Classification Algorithms](#)

EDUCATION

Bachelor of Computer Applications (BCA) — Brainware University | 2024–2028

Last Semester SGPA: 9.25 | Equivalent Percentage: 87.14%

CERTIFICATIONS & JOB SIMULATIONS

Machine Learning Intern — Valentius Kryptix (Sep 2026) | Get Started with SQL Analytics and BI on Databricks — Simplilearn SkillUp (Sep 2026) | SQL — The Skill to Master First as a Data Analyst — WsCube Tech (Aug 2026) | GenAI Powered Data Analytics Job Simulation — Tata / Forage (Aug 2026) | Cyber Job Simulation — Deloitte / Forage (Aug 2026)