Vishwas Kaushik

Rajasthan, India |+91 9511380643 | vishwas.kaushik22@st.niituniversity.in | LinkedIn | GitHub | Portfolio

Experience

Teaching Assistant, NIIT University, Neemrana   **Aug 2023 - May 2025**

Worked in the Centre of Excellence in Educational Technology (CoEET), contributing to project planning, data analysis, and technology integration to optimize student project workflows.

- Coordinated and tracked **80+ academic projects per semester**, mapping student teams to industry-relevant initiatives and mentoring juniors in project workflows using survey-based data analysis.
- Researched, deployed, and managed technology tools (Asana, CMS) to streamline collaboration across **6+ desks**, enhancing efficiency, feedback channels, and tool adoption.
- Designed and implemented project allocation and evaluation workflows using Excel and survey data, making the process more robust and systematic for consistent execution each semester.

Projects

Riskos: Stock Risk Analysis Web App | GitHub Link

- Developed a full-stack web app with Python, React, and financial APIs to evaluate portfolio risks (VaR, CVaR, Sharpe Ratio) and forecast volatility (ARIMA, GARCH) for **50 Nifty50 index stocks**.
- Containerized the app with Docker and configured CI/CD pipelines in Jenkins for seamless deployment, supporting data-driven decision-making for retail investors.

Empowering Rural Healthcare through AI Solutions (R&D)

- Implemented a multimodal cancer stage prediction pipeline combining medical image models (ResNet18, DenseNet121) with late-fusion ensembles; explored integration of NLP methods for clinical reports. Ensemble stacking improved **validation accuracy from ~53% to ~84%**.
- Researched **10+ studies** in deep learning, NLP (BERT/XLNet), and Generative AI (synthetic data generation) to address medical data scarcity and improve robustness of healthcare AI models.

HR Analytics Dashboard (Employee Attrition) | GitHub Link

- Developed an interactive Power BI dashboard (**IBM HR dataset, ~1.4K records**) with DAX measures and calculated bands to track attrition KPIs across departments, job roles, and demographics.
- Identified key attrition drivers (low salary, overtime, low satisfaction), highlighting high-risk roles such as Sales Representatives (**40% attrition**) to support strategic HR retention decisions.

Predictive Modeling Case Study Portfolio | GitHub Link

- Completed **11 end-to-end ML case studies** in Google Colab using CSV datasets, applying EDA, regression, classification, clustering, time series forecasting, PCA, CNN, and cross-validation.
- Built domain-specific models across finance, astronomy, e-commerce, and computer vision, translating data into actionable insights through statistical analysis and predictive modeling.

Education

B.Tech. in Computer Science, NIIT University   **2022 to 2026**
CGPA: 8.62

XII, RS MEMORIAL INT SCHOOL (CBSE)   **2021**
X, Central Academy (CBSE)   **2019**

Skills

- **Languages & Libraries:** Python, R, JavaScript, SQL, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn
- **Databases:** MySQL, MongoDB
- **Data Analysis & Visualization:** Power BI, Exploratory Data Analysis (EDA)
- **Frameworks & Tools:** Docker, Jenkins, Git, Asana, Jupyter Notebook
- **Core Competencies:** Machine Learning, Artificial Intelligence, Deep Learning, Statistics, Predictive Modeling, Big Data Concepts