# Vishwas Kaushik

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## **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 using survey-based data analysis.
- Researched, deployed, and managed technology tools (Asana, CMS) to streamline collaboration across 6+ desks and enhance feedback channels.
- 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, enabling automatic builds and seamless updates on every code push.

## **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, and designed an NLP component for clinical reports; ensemble stacking **improved validation accuracy from ~53% to ~84%**.
- Researched and compared 10+ studies in deep learning, NLP (BERT/XLNet), and Generative AI, exploring synthetic data generation to address scarcity and strengthen model robustness.

## 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 data-driven HR retention strategies.

## 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