

Vineel Rayapati

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Education

Master's in Data Science, University of Colorado Boulder

August 2023 - May 2025

- CGPA : 3.99 / 4

Bachelors of Technology in Computer Science and Engineering, Amaravathi

July 2019 - May 2023

- CGPA : 8.25 / 10

Skills and Certificates

- Programming: Python, R, SQL, My-SQL, Java Script, Java
- Frameworks: HTML, CSS, Node JS, React, Django
- Technical : ML, Data Analytics, Data Mining, OOPS, Deep Learning, Mobile Application Development
- Scientific Computing with Python (FreeCodeCamp), R Programming and Tidyverse; Expressway to Data Science: Essential Math; Expressway to Data Science: Python Programming

Work Experience

Backend Python & AI Development Intern, EDUTECHEX Hyderabad, Telangana, India, December 2022 - June 2023

- Developed REST APIs, database schema and backend architecture using Python and Django to power a dynamic web application
- Collaborated with front-end developers to integrate Python backend with user-facing components
- Researched machine learning frameworks like TensorFlow/PyTorch and experimented with pre-trained NLP/CV models to gain hands-on AI experience
- Implemented basic ML pipelines for prediction tasks using scikit-learn and evaluated models to compare algorithms

Projects

ENERGY EFFICIENCY PREDICTION

- Engineered feature pipelines, ML model comparison, hyperparameter tuning and evaluation for Energy Star score prediction.
- Tested algorithms like Random Forest to reduce error by 10 points over baseline predictions.
- Identified building factors with highest correlation to energy efficiency to prioritize upgrades.

UNIVERSITY MANAGEMENT WEB APP

- Built a web application using Java, SQL Server and ASP.NET to automate university admin workflows including admissions, academics, attendance and fees.
- Streamlined previously manual processes to improve efficiency for students, faculty and admins.
- Enabled real-time access to academic records, attendance reports and fee status through a centralized dashboard.

WALMART SALES FORECASTING

- Engineered feature processing, modeling and evaluation pipelines in R to predict store department sales using historical data.
- Tested and tuned algorithms like XGBoost to improve accuracy metrics by 15% over baseline models.
- Enabled data-driven decisions on inventory planning, staffing and promotions to reduce costs and increase revenue.

Leadership Experience

- As Adventure Club Manager, I led coordination, planning, and management for over 10 club adventures and members while spearheading growth and engagement initiatives, handling budgets and sponsorships, and guaranteeing adventures met all safety guidelines.

Course Work

Data Structures, Operating Systems, OOPS, Web Technologies, Computer Networks, Mobile Application Development,

- Artificial Intelligence, Machine Learning, Network Programming, Digital Image Processing, Design and Analysis of Algorithms, Deep Learning,
- Data Mining, Database Management systems, Data Analytics

Extra curricular activities

- Rock climbing, Hiking, Soccer, photography, Cooking