Anudeep Nayak

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Available Immediately

EDUCATION

MS in Data Science — August 2023 - May 2025
University of Colorado Boulder — GPA 3.93

B. Tech in Computer Science and Engineering — August 2018 - June 2022
Manipal Institute of Technology

PROFESSIONAL EXPERIENCE

Software Engineer — July 2022 - August 2023
GE Healthcare — Bangalore, India
- Analyzed supply chain datasets and implemented authentication APIs, reducing processing time by **80**% through statistical optimization
- Built automated data processing pipelines for **20**+ features using **SQL** and **REST APIs**, improving overall system performance metrics
- Resolved **40**+ bugs annually using systematic debugging and **CI/CD** tools, improving system stability and reducing downtime by **20**%

Software Engineering Intern — January 2022 - June 2022
GE Renewable Energy — Bangalore, India
- Developed machine learning **classification model** in Python achieving **98**% accuracy for automated data categorization and consistency
- Implemented **A/B** testing framework for **NPS** analytics, increasing customer feedback collection by **10**% through data-driven UX optimization
- Enhanced data quality metrics through statistical testing, increasing coverage from **45**% to **80**% and reducing duplication by **50**%

PROJECT EXPERIENCE

AniTA network (AI TA) — University of Colorado Boulder
- Built ML-powered grading system using **LLMs** and **RAG**, achieving **90**% accuracy correlation with human graders
- Implemented network analysis with clustering algorithms (**Louvain**, **Jaccard similarity**) to detect inconsistencies
- Deployed scalable **ML pipeline** on **GCP** with **Redis** caching and **Kafka** streaming for real-time inference

Clearhead (ADHD Todo App) — Personal Project
- Built intelligent task management system in React native and **behavioral analytics** to optimize productivity for ADHD users
- Implemented **random forest** to analyze user patterns and provide personalized task prioritization recommendations
- Developing data-driven features including time estimation models and focus pattern analysis to improve task completion rates

Audio Emotion Analysis — University of Colorado Boulder
- Built end-to-end **ML pipeline** for speech-to-text conversion and emotional sentiment analysis using **deep learning models**
- Integrated **OpenAI API** for speech-to-text conversion and implemented neural network classifier for emotion detection
- Achieved 80% accuracy in emotion classification using neural networks and feature extraction from audio spectrograms

Resume Classification — GE Renewable Energy
- Built automated classification system using **KNN**, **scikit-learn**, and **NLP** feature extraction (**TF-IDF**, **n-grams**)
- Won **1st place** at GE hackathon with **83**% classification accuracy through **hyperparameter tuning** and **cross-validation**

Cinecypher — University of Colorado Boulder
- Developed content-based filtering using **LSI**, **TF-IDF vectorization**, and **cosine similarity** on 10K+ movie dataset
- Conducted **hypothesis testing** confirming significant correlation ($p < 0.05$) between movie runtime and revenue

Data 2 Chatbot — University of Colorado Boulder
- Engineered **NLP chatbot** using **OpenAI GPT-4** and custom **RAG** pipeline achieving **95**% accuracy for factual game queries
- Deployed scalable solution on **IBM Cloud** with optimized prompt engineering for contextual question handling

SKILLS

Machine Learning and Analytics: Python, Scikit-learn, TensorFlow, PyTorch, Statistical Analysis, Hypothesis Testing, A/B Testing, Predictive Modeling, Classification, Regression, Clustering, Feature Engineering

Data Sciencet: SQL, R, Pandas, NumPy, Data Mining, Data Visualization, Tableau, Power BI, ETL Pipelines, Statistical Modeling, Time Series Analysis, Graph analytics

Programming & Tools: Python, Java, JavaScript, Git, Docker, Kubernetes, AWS, GCP, Azure, REST APIs, CI/CD

Specialized: NLP, LLMs, RAG, Deep Learning, Neural Networks, Big Data, NoSQL (MongoDB)

CERTIFICATES

- **Team Essentials for AI** — IBM
- **R Programming and Tidyverse Specialization** — University of Colorado Boulder