Manan Agrawal

iammannu | iammananagrawal | magrawa5@charlotte.edu | (704)400-5050

Summary

- Proven research background with history of multiple research papers and 1 approved patent by govt. of India.
- Diverse experience with data-driven internships, including web performance analysis, historical data processing, and image processing for defect detection.
- Enthusiastic Graduate student with a passion for innovation, learning and knowledge expansion and potential leadership roles.

EDUCATION

MS Computer Engineering, UNC Charlotte Aug 2024 –Dec 2025

Btech Electronics Engineering, RCOEM, Nagpur University, India Jul 2020 – June2024

SKILLS

Languages and Frameworks: Python, SQL, R, DAX, JavaScript, Node.js

Tools/Technologies: Microsoft Power BI, Tableau, NumPy, Pandas, Scikit-learn, NLP, TensorFlow, Web Development

PROFESSIONAL EXPERIENCE

Intern (Eliora Technologies Pvt. Ltd) Jan 2024 - June 2024

- Analyzed web application performance data, leading to a 20% improvement in load times and a 15% enhancement in efficiency through data-driven backend optimizations.

Intern (IKS, AICTE) Oct 2022 - March 2023

- Researched and analyzed vast historical datasets for the Indian Knowledge Systems project, ensuring 95% accuracy and coherence in a 300-page published book.

Intern (Hixaa Technologies Pvt. Ltd.) Nov 2022 - Sept 2023

- Applied data-driven image processing algorithms for PCB defect detection, achieving 90% accuracy by processing and analyzing over 10,000 PCB images, resulting in a 20% reduction in manufacturing defects.

PROJECTS

Data Analytics for Price Projections

- Utilized advanced analytics and machine learning models (Random Forest, Linear Regression) to project prices with 92% accuracy, providing actionable insights that improved decision-making efficiency by 30%.
- Presented actionable insights to stakeholders, facilitating a 20% faster decision-making process through effective collaboration.

OCR as the fastest scanning device

- Developed an OCR system using machine learning algorithms, increasing text recognition accuracy by 25% and reducing manual data entry errors by 40%.
- Applied image preprocessing techniques and trained models for real-time text recognition and classification, achieving 95% precision in document scanning and analysis.

Financial Risk Analysis using Machine Learning

- Developed machine learning models to detect potential red flags in stock market data, improving risky investment identification by 30%.
- Analyzed 5 years of historical financial data, identifying 10+ key indicators and patterns that signal potential risks, providing actionable insights for risk mitigation.

Sentiment Analysis

- Executed sentiment analysis on large datasets of Facebook reviews using Python, NLTK, and SpaCy. Applied machine learning techniques for classification, enhancing customer feedback insights with 90% classification accuracy.

Honors,Papers and Patents

- ISDIA 2024 (Integrating Advanced Big Data Analytics for Strategic Price Projections in the Oil and Gas Industry)
- ICPCSN 2024 (Advancements in PCB Defect Detection : An In-Depth Exploration of Image Processing Techniques)
- ICCCNT 2024 (PCB Defect Detection Using Deep Learning Methods)
- Patent approved by Govt. of India (Design Number : 386153-001)
- Chairperson: IEEE RCOEM, Carrer Development and Placement Cell, RCOEM

Certifications

- Google Data Analytics Specializations (Google)
- Harnessing the Power of Data with Power BI (Microsoft)
- PCAP: Programming Essentials in Python (Cisco)
- Networking Essentials (Cisco)