Amrit Pandey

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EDUCATION

State University of New York at Buffalo — **Buffalo, New York**
Masters in Artificial Intelligence — Aug 2024 – May 2026 (Anticipated)

Thakur College of Engineering and Technology, Mumbai University — **Mumbai, India**
Bachelor of Technology, Artificial Intelligence and Machine Learning, CGPA: 8.8/10 — 2020-2024

SKILLS AND INTERESTS

Technical Skills: Python, R, NLTK, OpenCV, MongoDB, Power BI, Flask, JavaScript, Tailwind CSS, HTML, Bootstrap
Machine Learning & Data Science Libraries: Pandas, PyTorch, SciPy, NumPy, TensorFlow, Scikit-learn, Matplotlib
Specialized Techniques: Computer Vision (CV), Natural Language Processing (NLP), Generative Adversarial Networks (GANs), Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Graph Neural Networks (GNN)

WORK EXPERIENCE

Technical Lead - Alternative Clinic, Mumbai — ***June 2023 – Sept 2023***
• Developed and deployed an **AI-powered clinic portal**, **increasing patient volume by 43%, reducing reception workload by 18%, and enhancing appointment scheduling efficiency by 60%, improving the user experience.**
• Designed an **interactive Power BI dashboard** for **real-time data analysis**, reducing **review time by 30%**, **automating data insights**, **enhancing decision-making, and improving diagnostic efficiency for doctors.**

Artificial Intelligence Intern - VLine Infotech Pvt Ltd, Delhi — ***Jan 2023 - Apr 2023***
• **Developed a custom OCR-driven ML model** to automate **bank statement processing**, improving **text extraction accuracy by 15%**, reducing **manual effort**, and optimizing **financial document handling at scale**.
• **Led preprocessing and annotation** of **40,000+ financial documents**, reducing **processing time by 20%**, while integrating **NLP and deep learning** to enhance **document classification, parsing, and recognition performance**.

PROJECTS

Automated Cheque Processing with Machine Learning — ***Mar 2024***
• Computer Vision Integration: Utilized **OpenCV** and **OCR** techniques to extract key cheque details, including amount, date, and payee name, ensuring a **high extraction accuracy of 98%** in financial document processing.
• Machine Learning Model: Designed a **CNN-based fraud detection system, reducing cheque processing time by 80% while enhancing security, accuracy, and transaction validation for a fully automated process**.

Neural Network Training and Comparison Framework — ***Nov 2023***
• Deep Learning Model Evaluation: Developed an overarching framework **for training, benchmarking, and analyzing** multiple deep learning models, like **CNNs, RNNs, and GNNs**, to compare **performance on complex datasets**.
• Optimization & Performance Boost: Employed **hyperparameter tuning, dataset augmentation, and transfer learning**, resulting in a **30% increase in training efficiency** and **generalization** across various AI applications.

Automated Attendance System — ***July 2024***
• Facial Recognition Integration: Built an AI-powered attendance tracking system using **OpenCV and FaceNet**, enabling **real-time face detection** and authentication with **high accuracy and minimal false positives**.
• Seamless Database & Web Interface: Integrated **Flask & MySQL for secure** and efficient attendance management, streamlining operations, and reducing **manual entry errors by 30%**, which improved scalability for **enterprise use**.

Predictive Modeling for Income Classification — ***Oct 2024***
• **Feature Engineering & Optimization:** Extracted key socioeconomic features (**age, education, occupation, marital status**) to enhance classification. Applied **Random Forest with hyperparameter tuning** for robust predictions.
• High-Performance Classification: Achieved an **86% accuracy**, showcasing the model's effectiveness in income prediction for demographic and financial analytics, **enhancing decision-making in economic research**.

CERTIFICATIONS

- Software Engineering Job Simulation, **JPMorgan Chase & Co.**
- AI on Microsoft Azure, **Microsoft**
- Foundations: Data, Data, Everywhere; **Google**