SAURABH RAJPUT

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EDUCATION

Masters in Artificial Intelligence, Illinois Institute of Technology, Chicago, IL *August 2022 - May 2024*
Coursework: Machine Learning, Deep Learning, NLP, Computer Vision, and Social Network Analysis, Advanced AI.
Key Projects: Engineered a machine learning model using LSTM networks to predict disease spread, analyzing time-series data for accurate trend forecasting; Developed PyTorch-based NLP model for tweet sentiment analysis, integrating BERT for context-rich text interpretation, with 91% accuracy.

Bachelor of Computer Engineering, Jayawantrao Sawant College of Engineering, Pune, MH *August 2018 - June 2021*
Coursework: Comprehensive study of Data Structures, Computer Networks, Databases, OS, Machine Learning, etc.
Key Project: Implemented a deep learning model using TensorFlow and Python to predict traffic flow, aiming to enhance travel time estimations and resource allocation for transportation networks.

SKILLS

Languages:	Expert in Python, proficient in C++, Java, familiar with MATLAB.
AI & ML:	Skilled with TensorFlow, Keras, PyTorch; experienced with LLMs, NLP, OpenCV.
Data Analysis:	Pandas, NumPy, Scikit-Learn; experienced in SQL.
Web & Cloud Tech:	Basics of flask, React; comfortable with AWS and GCP, Git and GitHub, Docker
Soft Skills:	Exceptional communicator, collaborative, adept problem-solver, highly adaptable.

EXPERIENCE

Artificial Intelligence Engineer *December 2020 - March 2022*
Parkiez Mobility Pvt Ltd *Pune, MH*

- Improved parking space detection accuracy by 25% using Python, TensorFlow, and OpenCV, and deployed it on AWS.
- Leveraged AWS services (EC2, S3) to optimize cloud infrastructure, achieving a 30% increase in data processing capabilities and supporting scalable application deployment.
- Crafted and deployed AI models with TensorFlow on AWS SageMaker, accurately predicting parking space availability and significantly improving utilization efficiency.
- Utilized Jenkins for CI/CD along with AWS CodePipeline to cut deployment times by 40%, facilitating faster iterations and robust software delivery on cloud platforms.

PROJECTS

Smart Parking System: Utilized TensorFlow and OpenCV for an urban parking solution, incorporating OCR for license plate detection, significantly reducing urban traffic congestion.

Network Anomaly Detection: Employed Scikit-Learn for a cybersecurity enhancement project, identifying 95% of network anomalies.

Traffic Prediction Model: Combined Python and MATLAB to simulate urban traffic flow, supporting city planning with 88% predictive accuracy.

Environmental Change Detection: Applied CNNs within TensorFlow to analyze satellite imagery for deforestation, improving detection accuracy by 87%

Smart ATS (Application Tracking System): Leveraged LLM and NLP in Python and Streamlit for a resume analysis system, enhancing job match precision by 92%.

Automated Essay Scoring System: Implemented NLTK and machine learning for a grading system, reaching 92%.

Real-Time Object Detection for Surveillance: Implemented a real-time surveillance system using TensorFlow and Python on Raspberry Pi, leveraging Google Colab for cloud-based data processing, achieving 93% accuracy in unauthorized entry detection.