KARAN PANWAR

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Professional Summary

Data Scientist and AI Engineer with expertise in machine learning, computer vision, and full-stack development. Skilled in delivering business-oriented AI solutions, optimising processes, and creating scalable applications. Currently pursuing an MSc in Computer Science, with hands-on experience in developing end-to-end AI systems and integrating them into real-world workflows. Seeking an internship or full-time opportunity to contribute to innovative corporate projects.

Key Skills

ML & AI: TensorFlow, PyTorch, Keras, Scikit-learn, OpenCV, NLP, LSTM, CNN, GANs
Data Science: Pandas, NumPy, Matplotlib, Power BI, ETL Pipelines, Statistical Modeling
Web Development: Node.js, Python (Django, Flask), React.js, Next.js, TypeScript, REST APIs
Databases: MySQL, PostgreSQL, MongoDB
Tools & Platforms: Docker, Git & GitHub, Jupyter

Professional Experience

Research Assistant − Advanced Machine Learning　　　　　　　*Jan 2025 − May 2025*
Anglia Ruskin University, Cambridge, UK

– Researched and implemented Quantum Neural Networks for image recognition, demonstrating improvements over traditional CNNs.
– Designed imaging models to support strategic decision-making.
– Automated extraction of insights from large datasets using semantic processing algorithms.

Selected Projects

Cambridge Culture Website　　　　　　*Full-stack Development, University Assignment*

– Developed a comprehensive website showcasing Cambridge culture, collaborating effectively within a team of 4.
– Utilized modern web technologies to create an engaging and informative platform, delivering project requirements on time.

Project Management Platform　　　　　　　　*React, Django, MySQL, Real-time*

– Built a full-stack application that increased team productivity through efficient task management.
– Implemented role-based authentication, real-time notifications, and optimized queries reducing load times.

Digital Health & Wellbeing Agent　　　　　　*TypeScript, Node.js, NLP, REST APIs*

– Developed an AI-powered recommendation system delivering personalised health and wellbeing advice.
– Built a reliable backend infrastructure to support seamless multi-user interaction.

Stock Market Prediction Engine　　　　　　　　*LSTM, Python, Time Series*

– Designed and implemented an LSTM model to forecast financial market movements.
– Delivered an interactive dashboard for real-time monitoring and investment insights.

Sign Language Translator　　　　　　　　*Python, Django, Deep Learning*

– Created a real-time sign language translation application to enhance accessibility.
– Integrated speech-to-sign and text-to-sign conversion into a web platform.

Emotion-Based Music Recommender *CNN, Deep Learning, Computer Vision, Spotify API*

– Created a facial emotion recognition model integrated with Spotify for real-time playlist suggestions.
– Designed to enhance personalised entertainment experiences.

AI Image Cartoonizer *Python, OpenCV, GANs*

– Built a GAN-based model to transform real images into stylised cartoon artwork.
– Optimised the process for smooth, real-time performance.

Education

MSc in Computer Science *Sep 2024 – Oct 2025 (Expected)*
Anglia Ruskin University, Cambridge, UK
Modules: Machine Learning in Finance, ML for Imaging, Semantic Data Technologies, Advanced Web Solutions, Cybersecurity & AI Case Studies.

BSc in Computer Applications – First Class *May 2021 – May 2024*
St. Xavier's College, Ahmedabad, India
Modules: Python for Big Data, Database Management Systems, Data Structures, OOP, Statistical Computing.

Certifications

Python for Data Science (IBM) • Data Analytics Visualization (Accenture) • Software Engineering (JPMorgan) • Generative AI (BCG) • Cloud Practitioner (AWS) • Generative AI (TATA) • AI Fundamentals (Ford) • Data Analytics (Quantium) • Cybersecurity (British Airways)