KARAN PANWAR

📍 Cambridge, UK ✉ karanpanwar8595@gmail.com 📞 +44 7823 706 438 🌐 Portfolio ⚙ GitHub

👤 Professional Summary

A highly motivated and detail-oriented **Data Scientist** with practical experience in designing, developing, and deploying **scalable AI-driven solutions** across diverse domains. Possesses strong proficiency in **full-stack web development**, predictive data modeling, and crafting user-focused applications through human-centered design principles. Currently advancing academic and technical expertise through a **Master of Science in Computer Science** at Anglia Ruskin University, with a focus on machine learning, data analytics, and intelligent systems.

🎓 EDUCATION

MSc Computer Science — Sep 2024 - Present
Anglia Ruskin University — Cambridge, UK — Modules: ML in Finance, Advanced Web Solutions, Semantic Data Technologies, Cybersecurity, Research Methods

BSc Computer Applications — May 2021 – May 2024
St. Xavier's College — Ahmedabad, India — Core: Advanced Programming, Data Structures, Database Systems, Web Technologies, Statistical Analysis

⚙ TECHNICAL EXPERTISE

Programming: Python, SQL, Java, JavaScript, PHP
ML & AI: TensorFlow, Keras, Scikit-learn, OpenCV, LSTM, CNN
Data Science: Pandas, NumPy, Power BI, Matplotlib, Statistical Modeling
Web Development: React.js, Django, Flask, HTML5/CSS3, REST APIs
Tools: Jupyter, Git, MySQL, WebSockets, Real-time Systems

🎗 PROJECTS

Cambridge Culture Website (2025)
Full-stack Development + University Assignment
- ★ Developed 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

Emotion-Based Music Recommender (2025)
Computer Vision + Deep Learning + Spotify API
- → CNN-based facial emotion detection achieving **85% accuracy**
- → Integrated Spotify API for dynamic playlist generation, handling concurrent users

Stock Market Prediction Engine (2024)
LSTM + Time Series + Financial Modeling
- ◇ Interactive Power BI dashboards for real-time market visualization and risk assessment
- ◇ Advanced feature engineering with technical indicators and sentiment analysis

Project Management Platform (2024)
React + Django + MySQL + Real-time
- ▷ Full-stack application increasing team productivity
- ▷ Role-based authentication, real-time notifications, optimized queries reducing load times

Eye-Tracking Cursor Control (2024)
Computer Vision + Accessibility + HCI
- ✓ Gaze-based cursor control with advanced eye tracking achieving **95% accuracy**
- ✓ Custom calibration protocols for users with limited mobility

💼 Professional Experience

Research Assistant - Advanced ML — Jan 2025 - Present
Anglia Ruskin University — Cambridge, UK
- ★ Leading research on Quantum Neural Networks vs CNNs
- ★ Collaborating on financial ML applications and semantic data processing algorithms

✿ CERTIFICATIONS & INNOVATIONS

Certifications: Python for Data Science (IBM) ● Data Analytics & Visualization (Accenture) ● Software Engineering Simulation (JPMorgan) ● Advanced ML (Coursera) ● Cybersecurity Workshop

Additional Projects: Sign Language Translator (AI + Accessibility) ◇ Real-time Chat (WebSocket + Node.js) ◇ Spam Detector (NLP + ML) ◇ Weather API (Django) ◇ AI Cartoonizer (OpenCV)