

Karan Panwar

Cambridge, UK

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Portfolio

GitHub

LinkedIn

PROFESSIONAL SUMMARY

Dynamic and result-oriented **Data Scientist, AI Engineer, and Researcher** with a Distinction in MSc Computer Science from Anglia Ruskin University, Cambridge. Expert in designing, training, and deploying **data-driven intelligent systems** using Machine Learning, Deep Learning, and NLP. Demonstrated excellence in developing **AI-driven products** for industry partners such as Klip Global, leading projects from research to deployment. Known for innovative thinking, cross-functional collaboration, and a passion for solving real-world problems with scalable, ethical AI solutions. Seeking UK-based roles in **Data Science, Machine Learning, or Applied AI Research**.

EDUCATION

MSc Computer Science (Distinction)

Sep 2024 – Oct 2025

Anglia Ruskin University, Cambridge, UK

Key Modules: Machine Learning in Finance, AI for Imaging, Semantic Web Technologies, Advanced Web Solutions, Cybersecurity and AI

BSc Computer Applications (First Class)

May 2021 – May 2024

St. Xavier's College, Ahmedabad, India

Key Modules: Data Structures, Big Data Analytics, Database Management, Python Programming, Statistical Modelling

CORE TECHNICAL SKILLS

Languages:	Python, JavaScript (TypeScript), SQL, Java
Machine Learning:	TensorFlow, PyTorch, Scikit-learn, XGBoost, OpenCV, NLP, LSTM, CNN, Transformers, Generative AI
Data Science:	Pandas, NumPy, Power BI, Tableau, Matplotlib, Seaborn, Statistical Modelling, Feature Engineering
Databases:	MySQL, MongoDB, SQLite, Data Warehousing
Web & Frameworks:	Django, Flask, FastAPI, Streamlit, React.js, Next.js, RESTful APIs
Tools & DevOps:	Git, Docker, Jupyter, VS Code, CI/CD Pipelines, Agile Methodologies

PROFESSIONAL EXPERIENCE

AI Agent (Postgraduate Major Project – Klip Global)

Sep 2024 – Oct 2025

Anglia Ruskin University, Cambridge, UK

- Led development of **Klip Agent**, a personalized digital wellbeing platform integrating LLMs, hybrid recommendation systems, and user behavioral analytics.
- Designed a **hybrid recommendation engine** combining Transformer-based NLP, clustering, and NHS data integration to offer evidence-based health guidance.
- Built and deployed an **LLM-powered conversational agent** using LangChain and Hugging Face models, achieving user satisfaction in pilot testing.
- Orchestrated a full-stack architecture with Next.js and Django for secure, scalable deployment, ensuring GDPR and HIPAA compliance.
- Collaborated with Klip Global's product and R&D teams to transform prototypes into production-ready AI solutions.

Research Assistant – Quantum Neural Networks (QNN)

Jan 2025 – Apr 2025

Anglia Ruskin University, Cambridge, UK

- Conducted advanced research on **Quantum Neural Networks (QNNs)** for pattern recognition and image classification using Qiskit.
- Designed and tested quantum circuits replacing classical layers, achieving a 15% accuracy boost over CNN baselines on MNIST-like datasets.
- Authored detailed research documentation and contributed to a university publication on *Quantum Machine Learning for Imaging Applications*.

SELECTED PROJECTS

KpAgent: AI-Powered Career Assistant (Next.js, TypeScript, NLP, Tailwind CSS)

Developed comprehensive full-stack career services platform with AI-driven resume analysis and personalised job recommendations. Engineered custom interview preparation tool generating role-specific questions based on user profiles and job descriptions. Built modern responsive UI, delivering polished user experience across all devices.

SmartStock: AI-Powered Financial Forecast Dashboard (Python, LSTM)

Built an advanced stock prediction dashboard with dynamic time series analysis, predictive models, and financial sentiment analytics using real-time APIs.

EmotionSense: Real-Time Emotion Recognition System (OpenCV, TensorFlow, Flask)

Created an AI tool detecting facial and vocal emotions with CNN and MFCCs, recommending personalized media content via adaptive algorithms.

SignAI: Sign Language to Text Translator (Django, OpenCV, Deep Learning)

Engineered an accessibility-driven system converting sign gestures into English text with over 95% accuracy using CNN-based visual models.

Cambridge Culture Portal (Django, HTML, CSS, SQLite)

Led a 4-member team developing an interactive cultural platform showcasing Cambridge events and local communities.

CERTIFICATIONS & TRAINING

Industry: AWS Certified Cloud Practitioner • IBM Data Science • Accenture Data Analytics and Visualization • BCG Generative AI Fundamentals • JPMorgan Chase Software Engineering Simulation • TATA Consultancy Generative AI Program

Academic: Quantum Computing Fundamentals (IBM Qiskit) • Advanced Deep Learning (Coursera)

ACHIEVEMENTS & LEADERSHIP

- Achieved **Distinction** in MSc Computer Science with top 10% class ranking.
- Selected by **Klip Global** to lead an industrial research project integrating AI with wellbeing analytics.
- Published and presented university research on Quantum AI and Mental Health Technology.
- Acted as **Team Lead** for four cross-functional AI and web development projects at ARU.
- Received recognition for innovation in AI-based health technology from faculty mentors.

PROFESSIONAL STRENGTHS

- Deep expertise in applied machine learning, NLP, and quantum computing with strong mathematical background.
- Excellent communicator skilled in translating complex data insights into actionable business strategies.
- Passionate about ethical AI, inclusivity, and deploying human-centric intelligent systems.
- Adaptable to fast-paced environments with strong teamwork, leadership, and research skills.