

# Karan Panwar

Cambridge, UK

karanpanwar8595@gmail.com

+44 7823 706 438

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

---

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

## PROFESSIONAL EXPERIENCE

---

### AI Engineer (Postgraduate Major Project – Klip Global)

Sep 2024 – Oct 2025

Anglia Ruskin University Collaboration, 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.