

# Khadija Nadeem

State College, PA — +1 (804) 245-7904 — khadija.nadeem714@gmail.com  
github.com/khadijaanadeem — linkedin.com/in/khadijaanadeem

## PROFESSIONAL SUMMARY

Computer Science student at Penn State with hands-on experience in deploying ML models and LLM-powered applications. Built high-impact projects in recommendation systems, fraud detection, NLP, and stock forecasting.

## TECHNICAL SKILLS

**Languages:** Python, JavaScript, SQL, HTML/CSS

**Libraries:** scikit-learn, TensorFlow, Keras, XGBoost, OpenCV, pandas, NumPy

**Frameworks & Tools:** Hugging Face Transformers, Ollama, Gradio, PDFMiner, LangChain

**Concepts:** Machine Learning, Deep Learning, LLMs, CNN, RNN, Embeddings, Time Series Forecasting

## PROJECTS

### Semantic Book Recommender

*Gradio, Hugging Face, Python*

- Built a semantic recommender using LLM embeddings to suggest books from Kaggle dataset based on user-provided descriptions.
- Integrated Hugging Face model and deployed intuitive UI using Gradio.

### Resume Editor with DeepSeek LLM

*Gradio, Ollama, Python, PDF/Text Parsing*

- Developed an AI-powered tool that analyzes resumes and job descriptions to suggest tailored improvements.
- Integrated Ollama's DeepSeek LLM; exported updates as downloadable PDF and editable text.

### Credit Card Fraud Detection

*Python, RF, SMOTE, SHAP*

- Built ML pipeline for highly imbalanced fraud data; achieved 98% precision and 88% F1-score.
- Visualized feature impacts using SHAP for explainability.

### Car Brand Classification

*TensorFlow, EfficientNet, Grad-CAM*

- Trained CNN on 18k images from 33 car brands; achieved 92% accuracy with data augmentation.
- Visualized decision-making using Grad-CAM activation maps.

### Apple Stock Trend Prediction

*Python, TensorFlow, LSTM*

- Trained LSTM model to forecast 3-day AAPL stock movements based on historical data.
- Built full pipeline: data prep, time windowing, hyperparameter tuning, trend visualization.

## EXPERIENCE

### Software Intern, GCS Pvt. Ltd., Karachi

*Summer 2025*

- Built classification models (Random Forest, XGBoost) for client risk analysis; improved F1-score by 15%.
- Reduced pipeline runtime by 30% using batching and optimized feature selection.
- Collaborated with 6 engineers to integrate models into reporting dashboards.

### Grader, Penn State

*Spring 2024*

- Evaluated assignments and exams for Calculus I and Elementary Statistics.
- Graded work for 100+ students and provided timely, consistent feedback.

## EDUCATION

### Pennsylvania State University, University Park

*Expected May 2026*

B.S. Computer Science — Dean's List

Relevant Coursework: OOP, Python, JavaScript, Machine Learning, Discrete Math, Digital Systems

Nixor College, Karachi

A-Levels: Mathematics, Physics, Chemistry

## PUBLICATIONS

### "Going further and farther with AI" — Dawn News

*July 2025*

Explored global AI trends and Pakistan's potential in the generative AI wave.

<https://www.dawn.com/news/1926244>

## LEADERSHIP & VOLUNTEERING

### Events Director (Elected), PSA University Park

*Starting Aug 2025*

Vice President, PSA Harrisburg

*Nov 2024 – May 2025*

Flood Relief Volunteer, Sindh Police

*Sep 2022*

Volunteer, MBAKH, Nixor College

*Jun 2021 – Jul 2023*