

M. BILAL JAVED

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Location: Islamabad

SUMMARY

Final-year B.S. Computer Science student with hands-on experience in AI/ML, computer vision, and full-stack development. Skilled in building end-to-end AI pipelines — from data ingestion and deep learning models to backend API design, database integration, and frontend visualization. Proficient in transformer-based NLP, GANs, multi-agent workflows, and real-time computer vision systems. Passionate about applying AI to real-world problems, from semantic analysis of user comments to accessibility solutions for senior users.

EDUCATION & Experience

AI intern - VisionX

June 2025 - Aug 2025

- Worked on computer vision projects including facial recognition and shoplifting detection during internship at VisionX.

Bachelors in Computer Science

Aug 2022 - June 2026

- Specializing in AI/ML and Software development.

PROJECTS

Classroom Student Engagement Analysis (Final-Year Project)

Sep 2025 - Apr 2026

- Building a computer vision pipeline using YOLO, a custom emotion-detection model, and action recognition to measure student engagement from lecture videos.
- Designing backend APIs and visual dashboards to store and present engagement metrics, demonstrating a full AI-to-deployment workflow.

Multi-Agent Prescription-to-Audio Workflow (Urdu)

Nov 2025 - Dec 2025

- Created a multi-agent AI workflow where an LLM (Gemini API) extracts and validates data from prescription images and generates simplified explanations.
- Converted the LLM output into Urdu audio using Google TTS to improve accessibility for elderly patients.

Platform for Semantic Analysis of YouTube Comments

Oct 2025 - Nov 2025

- Developed a full-stack platform (FastAPI + PostgreSQL + frontend) that ingests YouTube comments and performs semantic/sentiment analysis using transformer models from Hugging Face.
- Visualized processed insights through an interactive UI, showcasing end-to-end integration of AI pipelines with web technologies.

Shoplifting Detection System

Jul 2025 - Jul 2025

- Built a CV pipeline using YOLO for detection and X3D for action recognition to identify suspicious behavior in retail environments.
- Fine-tuned models on custom datasets to improve shoplifting detection accuracy and support real-time security alerts.

TECHNICAL SKILLS:

- Python, Java, C/C++, Kotlin, AWS (EC2, Lambda, RDS, EKS, SageMaker)
- LLM, Tensorflow, PyTorch, Transformers, GANs, HuggingFace RAG, n8n
- Power BI, Matplotlib, Seaborn, MySQL, PostgreSQL
- Git, GitHub, Docker, Kubernetes, RESTful API, FastAPI, Flask

CERTIFICATIONS & ACHIEVEMENTS:

- AWS Cloud Foundation Course (Simplilearn & AWS Educate)
- Deep Learning Specialization by AndrewNg (Coursera)
- Awarded a scholarship for outstanding academic performance in FSC from PEEF