

JAVERIA YOUNUS

Islamabad, Pakistan

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Profile

IT graduate with strong hands-on experience in AI research pipelines, lab tools (Cisco Packet Tracer, Git, Docker basics), and student mentorship. Currently an AI Research Trainee (medical imaging). Skilled in OOP, DSA, Python and maintaining reproducible workflows. Seeking a Lab Engineer role to support university lab operations, assist students, and maintain research/teaching environments.

Education

National University of Modern Languages (NUML)

Feb 2022 – Jan 2026

Bachelor of Science in Information Technology

CGPA: 3.66/4.0

Relevant Coursework: OOP, Data Structures & Algorithms, Networking (Cisco Packet Tracer), Databases, AI.

Islamabad Model College for Girls F7/4 Margalla

2019 – 2021

Intermediate in General Science

Grade: A+ (84.3%)

Research & Lab Experience

AI in Dentistry Research Group (International Collaboration)

Ongoing

AI Research Trainee

Remote

- **PAI-SegScore (Manuscript in prep):** Authored the Related Work section of a peer-reviewed journal manuscript; performed gap analysis showing prior pipelines treat ordinal grading as nominal classification and lack calibrated confidence leading to a novel three-stage architecture. Supported computer-vision experiments and preprocessing workflows.
- **Automated CEJ Detection (Ongoing):** Conducted literature review across tooth-landmark detection and intra-oral radiograph segmentation; identified generalization gaps in heuristic-based detectors. Contributing to deep-learning approaches, annotation workflows, augmentation strategies, and baseline model implementations.
- **Root Taper Measurement (Ongoing):** Investigating weak vs strong supervision segmentation strategies for root canal contour extraction and geometric measurement; synthesized literature on geometric quantification from segmentation outputs.
- **Research Outputs:** "PAI-SegScore: A Three-Stage Deep Learning Pipeline for Ordinal Periapical Index Assessment with Calibrated Uncertainty Quantification" manuscript in preparation for submission to a peer-reviewed international journal (2026). CEJ Detection and Root Taper Measurement projects, manuscripts in development. Maintained reproducible experiment documentation and supported dataset management.

Full Stack AI Bootcamp (GIKI)

2025

ML Trainee

Pakistan

- Completed intensive hands-on training in ML fundamentals, NLP, LLMs, and computer vision.
- Implemented classifiers, object detection models (YOLOv11), and LLM-based agents in Python/PyTorch.
- Practiced environment setup, debugging, version control (Git), and collaborative coding.

Industry Experience

Kreative Ally (German Company)

Feb 2026 – May 2026

Junior Webflow Developer

Remote

- Develop and maintain responsive web solutions for international clients using Webflow, HTML/CSS, and JavaScript.
- Collaborate with a distributed Agile team using version control (Git/GitHub) and project management tools.
- Troubleshoot cross-browser issues, optimize performance, and implement client feedback iteratively.

Dynamic 360

Nov 2025 – Dec 2025

Web Developer Intern

Islamabad

- Built and tested responsive web components using React.js and modern CSS frameworks.
- Assisted in debugging, performance improvements, and deployment workflows.
- Used Git for version control and participated in collaborative development cycles.

Teaching & Mentorship

Google Developer Groups (GDGoC), NUML

Deputy Campus Lead

2025

Islamabad

- Conducted technical workshops on Git, Python, and web basics; managed lab-like coding sessions for juniors.
- Mentored students in debugging, environment setup, and best coding practices.

Selected Projects

Custom Object Detection & Segmentation Pipeline

2024

Python, PyTorch, YOLOv11, Roboflow

- Built an end-to-end detection and segmentation pipeline: dataset creation, annotation, augmentation, and hyperparameter tuning.
- Trained YOLOv11 models; evaluated using mAP, IoU, precision, and recall; improved performance through iterative training.
- Demonstrates ability to manage complex software workflows, version datasets, and reproduce results – key for lab research support.

Multi-Tool Conversational Agent (LLM + RAG)

2025

Python, Gemini API, Vector Search

- Developed an LLM-powered agent capable of dynamic tool invocation for arithmetic, search, and retrieval-augmented responses.
- Integrated embeddings and vector search to enable contextual reasoning and document-aware responses.
- Achieved 96% on GSM8K-style reasoning benchmarks; showcases API integration and environment configuration skills.

Fashion Forge – 3D AI Customization Platform

2024

React Three Fiber, DALL·E, Tailwind CSS

- Developed an interactive 3D interface for product customization with real-time rendering.
- Implemented AI-assisted design suggestion features using generative models; debugged frontend-backend integration.

Technical Skills

- **Programming & CS Core:** Python, C++, JavaScript, OOP, Data Structures & Algorithms
- **Networking & Lab Tools:** Cisco Packet Tracer, Jupyter, VS Code, Git/GitHub, Linux basics, Docker (basic)
- **AI/ML:** PyTorch, YOLOv11, Scikit-learn, Gemini API, vector search
- **Web Dev:** React.js, Tailwind CSS, Webflow, REST APIs (basic)
- **Data & Pipelines:** Preprocessing, annotation, augmentation, mAP, IoU

Achievements & Certifications

- Prime Minister Laptop Merit Award — Top 3 Ranked Student (Institutional Level, 2023)
- Recognized among “100 Young Influencers of Pakistan” for Technology & Leadership (2024)
- Google AI Essentials Specialization — Career Certificate Scholarship (2025)
- HEC DLSEI — Meta Front-End Specialization (2023)
- Full Stack AI Bootcamp — GIKI (2025)

Leadership & Activities

- Deputy Campus Lead — Google Developer Groups (GDGoC), NUML
- Member — NUML Women in Tech
- Team Lead — Creative Leaders Conference, NUML (Managed team of 20+ members)