Zargham Elahi

Software Engineer • ML Engineer • UI Designer

LinkedIn | GitHub | Portfolio
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Objective

Self-driven Computer Science student with strong interest in AI, app and web development, and practical problem-solving. Eager to collaborate on impactful projects and learn cutting-edge technologies.

Education

Intermediate in Computer Science (ICS), Punjab Group of Colleges *2019 – 2021*
Studied core computer science subjects including Programming, Mathematics, and Physics.

BS Computer Science, University of Engineering and Technology (UET), Lahore *2021 – 2025*
Relevant Coursework: Machine Learning, Data Structures, OOP, Operating Systems, AI, Database Systems

Projects

Dyslexia Detection Mobile App (Lexa)
Developed a CNN-powered app to detect dyslexia in children through activity-based video analysis (94% accuracy). Integrated into a Flutter app via Flask API.

- Collected and labeled 80,000+ video frames from real child interaction data.
- Enabled easy upload and diagnosis with visual/audio feedback for parents.

Tech: Python, CNN, TensorFlow, Flask, Flutter, OpenCV

Concrete Strength Predictor
Built a web-based ML tool to predict strength of fiber-reinforced concrete using Random Forest (98% accuracy).

- Trained on custom dataset including cement, fiber, water, and aggregate ratios.
- Deployed using Flask; users can input parameters and get instant predictions.

Tech: Python, Scikit-learn, Flask, HTML/CSS

Live Pipeline Inspection System
Created real-time detection system to classify pipeline health via YOLOv8, with IP streaming and alerts.

- Annotated 15,000 images (corrosion, fracture, healthy) for training.
- Implemented remote access with video stream and audible danger alerts.

Tech: YOLOv8, OpenCV, Flask, Python

Technical Skills

- **Languages/Frameworks:** Python, C++, Dart, JavaScript, Flutter, HTML/CSS
- **Libraries/Tools:** Flask, OpenCV, Scikit-learn, YOLOv8, TensorFlow, NumPy, Pandas
- **Dev Tools:** Git, GitHub, Google Colab, VS Code
- **Core Areas:** Machine Learning, Deep Learning, Computer Vision, API Development, Responsive UI

Certifications

Artificial Intelligence Course, KICS UET Lahore *Duration: 3 Months*
Covered supervised/unsupervised ML, neural networks, real-world deployment.

Leadership & Experience

Head Web Person, IEEE UET Chapter
Led frontend/backend website development for society events and campaigns.

- Coordinated with core committee to organize 5+ campus-wide tech events.
- Managed student outreach through digital platforms and newsletters.

Additional Highlights

- Developed over 10+ personal and academic projects.
- Fast learner, great at breaking down complex problems into solvable tasks.
- Strong communication and teamwork skills developed through society work.