

Laiba Aamir

Place of birth: Faisalabad, Pakistan | **Phone number:** (+92) 3226344092 (Home) | **Email address:** laibaaamir979@gmail.com | **LinkedIn:** https://www.linkedin.com/in/laiba-aamir-8b714a301/ | **Git Hub:** https://github.com/Earwigmoth10 | **Portfolio:** https://laiba-aamir-creative.lovable.app | **Address:** Pakistan (Home)

ABOUT ME

BS Software Engineering student (CGPA: 3.71/4.00) with research experience in **Machine Learning, Deep Learning, Speech Processing, and EEG-based Healthcare AI**. Developed **speaker-independent stuttering detection** using CNNs and MFCCs, achieving **91.54% accuracy and 96.89% ROC-AUC**, and an **EEG-based dementia detection system** using spectral features and machine learning. Interested in graduate research in **Artificial Intelligence, Machine Learning, and Generative AI**, particularly for **intelligent healthcare and signal-processing systems**..

EDUCATION AND TRAINING

30/09/2023 – 30/06/2027 Faisalabad, Pakistan
BS SOFTWARE ENGINEERING The University of Faisalabad (CGPA 3.71)

29/10/2021 – 08/08/2023 Faisalabad, Pakistan
FSC (PRE-ENGINEERING GROUP) Govt . Graduate College For Women, Chak No. 122/JB, Sargodha Road

DISTINCTION CERTIFICATE

Achievement

Rafiq certificate for achieving 93.7% in 3rd semester

WORK EXPIERENCE

19/06/2026 – 19/08/2026
AI/Machine Learning Intern at CYBEX school of IT professionals (On-Site)

- Prepared and processed datasets for machine-learning applications.
- Developed and evaluated machine-learning models as part of assigned AI projects.
- Contributed to research, technical documentation, validation, testing, and deployment activities.

15/07/2025 – 02/09/2025
VIRTUAL INTERNSHIP AS A MACHINE LEARNING INTERN AT DIGITAL EMPOWERMENT NETWORK

Contributed to machine learning tasks and projects while demonstrating creativity, proactive learning, and a strong commitment to professional growth.

RESEARCH & PREPRINTS

Stuttering Detection Using Deep CNNs and Cepstral Acoustic Representations Aamir, Laiba; Maqbool, Fatima (2026) — Zenodo

- Developed a speaker-independent CNN-based system for stuttering detection using MFCC-based acoustic representations.
- Achieved **91.54% accuracy and 96.89% ROC-AUC on unseen speakers**.
- Research code and technical report available on GitHub/Zenodo.

Links https://doi.org/10.5281/zenodo.22799577 | https://github.com/Earwigmoth10/Stuttering-Detection-Using-Deep-CNNs-and-Cepstral-Acoustic-Representations-.git

Multiclass Classification of Alzheimer's Disease and Frontotemporal Dementia from Resting-State EEG Using Spectral Band-Power Features and Cost-Sensitive Gradient Boosting Aamir, Laiba; Maqbool, Fatima (2026) — Zenodo

- Developed a machine-learning pipeline for multiclass classification of **Alzheimer's Disease (AD), Frontotemporal Dementia (FTD), and Healthy Controls (HC)** using resting-state EEG data.
- Extracted **spectral band-power features** and applied feature selection with a **cost-sensitive gradient-boosting model**.
- Evaluated model performance using subject-level validation to assess generalization to unseen subjects.
- **Preprint available on Zenodo.**

Links https://zenodo.org/records/22920984 | https://github.com/Earwigmoth10/AI-Powered-EEG-Dementia-Detection.git

PROJECTS

AI Research Assistant — RAG-based Scientific Literature Analysis

Python, LLMs, RAG, Hugging Face, Vector Database, Gradio

- Built a RAG system that allows users to upload research papers and ask questions grounded in the source documents.
- Implemented document chunking, embeddings, semantic retrieval, and LLM-based response generation.
- Developed an interactive interface and documented the architecture, methodology, and limitations on GitHub.

Link https://github.com/Earwigmoth10/AI-Research-Assistant-RAG-based-Scientific-Literature-Analysis.git

Data Set Quality Analyzer (CSV files)

Drop in a **CSV,** get back a letter grade. The app runs a set of **data-quality** checks against an uploaded dataset: **missing values, duplicates, outliers, suspicious zeros, class imbalance**, **useless columns, correlated features,** and combines them into a single score, using a model trained to predict how much a dataset's quality actually affects downstream model accuracy.

Link https://github.com/Earwigmoth10/Data-Set-Quality-Analyzer.git

AI Debugger Pro

A **web-based** code analysis tool that combines a trained machine learning classifier with a rule-based static analysis engine to flag security vulnerabilities and code-quality issues in **JavaScript, PHP, Python**, and **HTML** snippets.

Link https://github.com/Earwigmoth10/-AI-DebuggerPro.git

AI gold trading predictor

An ensemble machine-learning signal generator for **XAUUSD (Gold) on the H1 timeframe**, combining **XGBoost, LightGBM, and CatBoost** on top of live MetaTrader 5 market data. A Flask API serves BUY / SELL / NO_TRADE signals with entry, stop-loss, and take-profit levels, and a lightweight dashboard visualizes them in real time.

Link https://github.com/Earwigmoth10/ai-gold-trading-predictor.git

Skin Disease Classification System

Built a deep learning framework that automatically classifies skin diseases, using computer vision to identify and categorize different dermatological conditions from medical images.

Link https://github.com/Earwigmoth10/Skin-Disease_Classification.git

SKILLS

Machine Learning & Deep Learning

Supervised Learning, Feature Engineering, Scikit-learn, PyTorch, TensorFlow, CNNs

Generative AI & AI Tools

LLMs, Prompt Engineering, RAG, AI Agents, Hugging Face, n8n, Opal, Antigravity

Data & Development

Pandas, NumPy, SQL, MySQL, Git/GitHub, Gradio, Streamlit, Flask

Programming

Programming: Python, C++, OOP, Data Structures & Algorithms

CERTIFICATIONS & TRAINING

15/04/2025 – CURRENT

IBM Generative AI Engineering Professional Certificate — In Progress IBM | Coursera

Completed coursework in AI fundamentals, Generative AI, prompt engineering, Python for AI development, and AI application development with Flask.

Links https://www.coursera.org/account/accomplishments/verify/W9B9VSCVPUIB | https://www.coursera.org/account/accomplishments/verify/BJ4Z52AC0AXG | https://www.coursera.org/account/accomplishments/verify/KVJDWC61OGMR

01/01/2026 – CURRENT

IBM DevOps and Software Engineering Professional Certificate — In Progress IBM | Coursera

Completed coursework in DevOps, cloud computing, Agile/Scrum, and software engineering.

Link https://www.coursera.org/account/accomplishments/verify/N3DAIOQQV9TT

10/04/2026 – 27/06/2026

Data Science & Analytics (HP LIFE)

Data-driven decision-making, analytics methodologies, and data science fundamentals.

10/05/2024 – 16/07/2024

Supervised Machine Learning: Regression and Classification DeepLearning.AI | Stanford University | Coursera

Regression, classification, supervised learning, data preprocessing, and Scikit-learn.

Link https://coursera.org/verify/VF3Q56EP4235

01/03/2024 – 27/04/2024

Cybersecurity for Everyone from University of Maryland, College Park (coursera)

Link https://coursera.org/verify/J8DB3XBDMPNV

INTERNATIONAL CONFERENCES

26/09/2026

IEEE ComSoc STLC–FutureConnect 2026: AI, 5G/6G & Smart Energy Systems

Participated in discussions on **AI, 5G/6G, and Smart Energy Systems**, gaining insights into emerging technologies

19/11/2025 – 21/11/2025

3rd International Conference on Advance STEAM Education

Innovative approaches in Science, Technology, Engineering, Arts, and Mathematics (STEAM), emphasizing modern teaching methods, cutting-edge research, and interdisciplinary learning to prepare students for the challenges of the future.

04/05/2024

IEEE Faisalabad Students, Young Professional Women in Engineering Congress

IT involves computing, networking, cybersecurity, and data management, while AI enhances automation and decision making. Together, they drive innovation and digital transformation.

NETWORKS AND MEMBERSHIPS

CURRENT

Creative Director | E-Gaming Society, Department of Computer Science, University of Faisalabad (Saleem Campus)

Led the creative direction and promotional activities of the E-Gaming Society, designing visual content and coordinating creative campaigns for events.

CURRENT

Student Ambassador — AICON'26, NUST | 2026

Representing AICON'26 on campus and supporting AI community outreach, student engagement, and technology-focused activities.

SEMINARS

11/11/2025

Is AI really here to replace us

Participated in a session exploring the transformative role of Artificial Intelligence in the workforce, with discussions on automation, human AI collaboration, emerging career pathways, and future technological developments.

04/11/2025

Importance of LLM (Large Language Models) In Generative AI

Explored the capabilities of Large Language Models in Generative AI, including prompt-based applications, intelligent text generation, and practical use cases across modern technologies.

05/08/2025

Exploring the Future of Data Science & AI

Attended a seminar exploring how Data Science and AI are driving data-informed decision-making, predictive analytics, and intelligent solutions across diverse fields.

14/05/2024

E-COM START-UP TO SCALE-UP

A practical program on building and scaling e-commerce ventures, covering business strategy, digital marketing, customer engagement, and operational management.

EXTRACURRICULAR ACTIVITIES

23/09/2026

GitHub Dev Days Faisalabad — Event Organizer / Contributor

Contributed to the successful organization of GitHub Dev Days Faisalabad, supporting developer-community engagement and event coordination

11/09/2026 – 16/09/2026

NASA Open Science Essentials

Gained practical knowledge through the **NASA Open Science course**, focusing on open research practices, scientific collaboration, and data-driven methodologies.

27/04/2026 – 28/04/2026

Participant, Build with AI Hackathon –(GDGOC FAST-NUCES)Chiniot-Faisalabad Campus

Contributed to an **AI-focused hackathon** in a 3-member team, applying Google technologies to develop innovative prototypes while demonstrating problem-solving and technical adaptability.

08/05/2026 – 11/05/2026

Event Management & Discipline Lead ,HAVVA Festival, TUF

Coordinated crowd management, venue operations, and logistical activities across various cultural and artistic segments of a multi-day festival.