

# Engr. Menahil Khawar

**Address:** Wah Cantt, Pakistan

**Email:** menahil3khawar786@gmail.com, menahil.khawar@riphah.edu.pk

**LinkedIn:** Menahil    **Visit:** Menahil Khawar    **Phone:** +92-312-5803547

## PROFESSIONAL SUMMARY

---

Engr. Menahil Khawar is a Computer Engineer having Bachelor's and Master's degree in Computer Engineering with a specialization in Artificial Intelligence, Machine Learning, and Deep Learning from UET Taxila. She is actively involved in research and is serving as a Lab Engineer in the Department of Electrical and Computer Engineering at Riphah International University, where she is actively involved in laboratory teaching, student mentoring, and academic support activities.

Her research focuses on **EEG-based emotion and stress recognition**, explainable AI, biomedical signal processing, image processing, and AI-driven cybersecurity systems, with particular emphasis on stress, anxiety, and depression analysis. She has published **one high-impact journal paper (Impact Factor: 12.7) in Computer Science Reviews**, also has **four Scopus-indexed international conference papers** in the domains of EEG, emotion analysis, and explainable machine learning, along with book chapters. She is currently working on these research projects

She has contributed to academic administration through her role as **FYP Committee Head**, UG and Outcomes-Based Education (OBE), and as a **Focal Person for PG admissions committees**. With a strong inclination toward research-led teaching and academic service, her long-term career objective is to pursue a PhD and establish herself as a faculty member contributing to high-impact research and quality higher education.

## WORK EXPERIENCE

---

**Lab Engineer**, Riphah International University (June 2024 – Present)

- Conduct laboratory sessions for Operating System, Computer Organization and Architecture, Electric Circuits, Digital Logic Design, Instrumentation, and Object-Oriented Programming (Java and C++).
- Provide hands-on training on Python, circuit analysis, and core computer engineering subjects.
- Assist undergraduate students in laboratory work, projects, and technical problem-solving.
- Support research activities related to AI, ML, DL, EEG, and biomedical signal processing.

## EDUCATION

---

**Masters in Computer Engineering**, University of Engineering and Technology, Taxila  
CGPA: 3.50

*MULTI-DOMAIN EEG TRANSFORMATIONS FOR ROBUST EMOTION CLASSIFICATION  
USING DEEP LEARNING APPROACHES*

**BS Computer Engineering**, University of Engineering and Technology, Taxila  
CGPA: 3.51

**FSc Pre-Engineering**, Scholar Science College, Wah Cantt

## ACADEMIC AND ADMINISTRATIVE RESPONSIBILITIES

---

- Lab Engineer, Department of Electrical and Computer Engineering, Riphah International University.
- Head, Final Year Project (FYP) Committee.
- Focal of Postgraduate and Member of Undergraduate Admission Committees.
- Member Person for Outcomes-Based Education (OBE).
- Actively involved in Tarbiyah, student mentoring, and academic management activities.

## PROFESSIONAL CERTIFICATIONS AND TRAINING

---

- Outcomes-Based Education (OBE) Workshops.
- IEEE Technical Workshop.
- BCI Workshop on Neuroimaging (FRINS) 5 Days Hands-on Training.
- Tarbiyah and Academic Management Workshop.

## OWNERS

---

- Highest IF journal for the year 2025 in the whole department.
- Best Teacher Reward.
- Best Early Researcher Reward
- Winner of Sports 2025

## RESEARCH INTERESTS

---

- AI for Medical Diagnostic.
- AI for CyberSecurity.

## RESEARCH PUBLICATIONS

---

- **Menahil Khawar** et al., "Shaping the Future of Cybersecurity: The Convergence of AI, Quantum Computing, and Ethical Frameworks for a Secure Digital Era," *Computer Science Review*, Impact Factor 12.7.
- **Menahil Khawar** et al., "Detecting Mental Health Conditions from Reddit Posts Using Machine Learning." in Dubai Conference
- **Menahil Khawar** et al., "A Hybrid EEG-Based Emotion Recognition with Dimensionality Reduction and Ensemble Learning." in INMIC 27 International Conference
- **Menahil Khawar** et al., "Explainable Ensemble Learning for Obesity Risk Prediction and Personalized Guidance." in ICIC Proceedings 2025
- **Menahil Khawar** et al., "Explainable HRV-Based Stress Detection Using Machine Learning" in ICIC Proceedings 2025.
- **Menahil Khawar** et al., "Resource-Efficient Models for Edge Devices". In *Edge Intelligence*. (Book Chapter In Press)
- **Menahil Khawar** et al., "Sea Pollution Detection Using Artificial Intelligence". (Under Review)
- **Menahil Khawar** et al., "EEG-Based Emotion Analysis Using Deep Learning". (Under Review)
- **Menahil Khawar** et al., "Book Chapter". (Under Review)

## TECHNICAL AND RESEARCH SKILLS

---

- |                                   |                        |
|-----------------------------------|------------------------|
| • Python, MATLAB, Java, C++       | • Microsoft Office     |
| • Machine Learning, Deep Learning | • Arduino IDE, Proteus |
| • LLM Models                      | • Google Colab, Kaggle |
| • Latex                           |                        |

## REFERENCES

---

- Ref. 1:**     **Prof. Sohail Khalid**  
Department of Electrical and Computer Engineering & Faculty of Engineering  
and Applied Sciences, Riphah , Islamabad, Pakistan.  
`s.khalid@riphah.edu.pk`, +92 3315215531
- Ref. 2:**     **Dr. Mujeeb ur Rehman**  
School of Computer Science and Informatics, De Montfort University, Leicester,  
UK.  
`mujeeb.rehman@dmu.ac.uk`, +44 7487 812085
- Ref. 3:**     **Dr. Sanay Muhammad Umar Saeed**  
Lecturer at Department of Computer Engineering (UET Taxila)  
`sanay.muhammad@uettaxila.edu.pk`, +923149503025
- Ref. 4:**     **Dr. Naveed Khan Baloch**  
Assistant Professor Department of Computer Engineering (UET Taxila).  
`naveed.khan@uettaxila.edu.pk`, +92-51-9047586