



IRFAN QUTAB

📍 **Home** : House#144, Street #1, Mohallaah Hussain Abad, Near Purani Chungi Khushab, 41000, Khushab, Pakistan

📍 **Work** : Department of Engineering "Enzo Ferrari", Via P. Vivarelli, 10, 41125, Modena, Italy

✉ **Email**: irfanqutab1@yahoo.com 📞 **Phone**: (+92) 3052169472

Date of birth: 23/09/1995 **Nationality**: Pakistani

EDUCATION AND TRAINING

[01/11/2024 – Current]

Ph.D. Scholar

University of Modena and Reggio Emilia

City: Modena | **Country**: Italy |

Field(s) of study: Information and Communication Technologies

[11/10/2018 – 28/09/2020]

Master of Science in Computer Science

The University of Lahore <https://uol.edu.pk/>

City: Lahore | **Country**: Pakistan |

[15/09/2018 – 11/09/2020]

B.ED

Allama Iqbal Open University <https://www.aiou.edu.pk/>

City: Islamabad | **Country**: Pakistan |

[05/10/2015 – 01/05/2018]

Master of Science in Information Technology

University of Sargodha <https://su.edu.pk/>

City: Sargodha | **Country**: Pakistan |

[15/10/2013 – 28/08/2015]

Bachelor of Science

University of Sargodha <https://su.edu.pk/>

City: Sargodha | **Country**: Pakistan |

WORK EXPERIENCE

Northwestern Polytechnical University

City: Xi'an | **Country**: China

[11/03/2023 – Current]

Research Assistant

- Assisted students in their research projects, providing guidance on methodology, data collection, and comprehensive literature reviews.
- Conducted data analysis using statistical software Python, ensuring accurate interpretation and presentation of research findings.
- Aided in writing and editing research reports, maintaining clarity and coherence, and adhering to academic standards.

Forces College

City: Jauharabad | **Country**: Pakistan

[20/06/2022 – 17/11/2022]

Computer science lecturer

1. I delivered an engaging curriculum through diverse methods of classroom instruction, computer lab activities, and online learning systems.
2. Set up computers and networking systems, delivering step-by-step instructions on basic use.
3. I taught coding language according to age group.
4. Managed network and system performance, conducting troubleshooting, security patching, and maintenance.
5. Oversaw IT department operations and training.

ILM Group of Colleges

City: Jauharabad | **Country**: Pakistan

[01/09/2019 – 31/03/2022] **Computer science lecturer**

1. I delivered an engaging curriculum through diverse methods of classroom instruction, computer lab activities, and online learning systems.
2. Set up computers and networking systems, delivering step-by-step instructions on basic use.
3. Managed network and system performance, conducting troubleshooting, security patching, and maintenance.
4. Oversaw IT department operations and training.
5. Built, repaired and installed computer-related hardware based on deployment procedures.
6. Collaborated with other departments to help meet IT needs and properly integrate and secure systems.

Dar-e-Arqam School

City: Jauharabad | **Country:** Pakistan

[01/09/2016 – 15/08/2022] **Science Teacher**

1. I delivered an engaging curriculum through diverse methods of classroom instruction, and computer lab activities.
2. I taught Mathematics, Physics and Computer Science subjects to the students of Matric class.
3. Collaborated with other departments to help meet IT needs and properly integrate and secure systems.
4. I taught coding language (GW-Basic).

The Punjab High School

City: Khushab | **Country:** Pakistan

[17/08/2015 – 31/08/2016] **Science Teacher**

1. I delivered an engaging curriculum through diverse methods of classroom instruction, and computer lab activities.
2. I taught Mathematics, Physics and Computer Science subjects to the students of Matric class.

PUBLICATIONS

[2025] [**Optimizing Sign Language Recognition Through a Tailored MobileNet Self-Attention Framework**](#)

Reference: Qutab, I., Po, L., Rollo, F., Naqvi, W. Optimizing Sign Language Recognition Through a Tailored MobileNet Self-Attention Framework. Appl. Sci. 2025, 15, 12622.

[2025] [**Improving Roman Urdu Topic Classification through Custom Stemming and an SGD-Optimized Machine Learning Pipeline**](#)

Reference: Aqeel, M., Qutab, I., Iqbal, K., Fiaz, H., & Arooj, H. (2025). Improving Roman Urdu Topic Classification through Custom Stemming and an SGD-Optimized Machine Learning Pipeline. Proceedings of the Pakistan Academy of Sciences. 62(4), 277-288.

[2024] [**A Hybrid Graph-spatial Spectral Transformer Framework For Hyperspectral Image Analysis**](#)

Reference: Butt, I. A., Bo, L., Qutab, I., Butt, R. A., Fatima, U., & Arif, M. A. A hybrid graph-spatial spectral transformer framework for hyperspectral image analysis. In Journal of Physics: Conference Series (Vol. 2906, No. 1, p. 012025). IOP Publishing.

[2024] **Research Projects**

1. Sentiment Classification of Covid-19 Comments on Twitter Data by Using BiLSTM-RNN
2. Advancing Sentiment Analysis of Chinese Comments on Weibo Dataset: A Hybrid Approach
5. Machine Learning Methodologies in Catalysis Research of AgPd Nanoalloy

[2024] [**Optimizing Sentiment Analysis: A Novel Hybrid Model Integrating PCC-HHO with BiLSTM-RNN for Enhanced Accuracy on Diverse Textual Datasets**](#)

Reference: Qutab, I., Asghar, Z., Aqeel, M., Fatima, U., Naqvi, W., & Muneeb, Y. (2024). IJERT. 13(10), 2278-0181.

[2024] [**Advancing Emotion Recognition in Facial Expressions through PCA, RFE, and MLP Integration**](#)

Reference: Qutab, I., Zheng,J., Aqeel, M., Fatima, U., & Butt, IA.(2024), IJISRA. 12(02), 2531–2542.

[2024] [Analyzing COVID-19 Sentiments on Twitter: An Effective Machine Learning Approach](#)

Reference: Qutab, I., Fatima, U., Aqeel, M., & Ahmed, I.(2024), IJISRT. 9(8), 841-850.

[2023] [Action Recognition of Human Skeletal Data Using CNN and LSTM](#)

Reference: Asghar, Z., Moin, S., Qutab, I., & Aqeel, M.(2023), IJIST.5(1), 20-37.

[2022] [Sentiment Classification Using Multinomial Logistic Regression on Roman Urdu Text](#)

Reference: Qutab, I., Malik, K. I., & Arooj, H. (2022). IJIST, 4(2), 223-335.

[2020] [Sentiment analysis for Roman Urdu Text Over Social Media, a Comparative Study](#)

Reference: Qutab, I., Malik, K. I., & Arooj, H. (2020). IJCSN, arXiv preprint arXiv:2010. 16408.

RESEARCH INTERESTS

Research interests

Machine Learning | Natural Language Processing (NLP) | Sentiment Analysis | Emotion Recognition | Ensemble Learning | Deep Learning | Graph Neural Networks | Transformers | Hyperspectral Image Analysis | Human-Computer Interaction (HCI) | Social Media Analytics | Time-Series Analysis | Multi-Agent Systems | Collaborative Agents | Autonomous Systems | Big Data Analytics | Computational Intelligence | AI in Healthcare | Pattern Recognition | AI-Driven Decision Making

LANGUAGE SKILLS

Mother tongue(s): Urdu

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Office | Problem Solving | C/C++ | Python | E-mail Communication | Database Administration | Data Entry | Teamwork & Collaboration | Maintenance & Repair | Documentaion & Reporting

HONOURS AND AWARDS

[19/05/2024] **Certificate of Honor Awarding institution:** Northwestern Polytechnical University

[19/06/2023] **Excellent Performance in Sports Awarding institution:** Northwestern Polytechnical University

[11/06/2023] **Outstanding Performance at the 7th International Cultural Festival Awarding institution:** Northwestern Polytechnical University

[24/07/2023] **Best Performance in Singing Competition Awarding institution:** Northwestern Polytechnical University

[09/12/2017] **Mehfil-e-Naat & Husn-e-Qirat Awarding institution:** Superior College Jauharabad

[09/11/2016] **Mehfil-e-Naat & Husn-e-Qirat Awarding institution:** Superior College Jauharabad

[18/11/2015] **Mehfil-e-Naat & Husn-e-Qirat Awarding institution:** Superior College Jauharabad

[17/11/2013] **Academia Awarding institution:** Govt. Post Graduate College Jauharabad