

Curriculum Vitae

Postal Address: Department of Electrical Engineering, UET Peshawar, Khyber ,
Pakhtunkhwa, Pakistan.



Prof. Dr. Gulzar Ahmad (BPS-21)

Personal Information	Father's Name Peer Mohammad Date of Birth 1-05-1970 Religion/ Nationality Islam / Pakistani NIC No. 16202-0982265-5 Domicile Swabi, K.P.K. (Pakistan) Marital Status Married
Objective	To get higher knowledge in the field of Electrical Engineering and teach this knowledge to my students in a befitting manner.
Education	S.S.C (1986) Marks: 674/850 Division: 1st From Board of Intermediate & Secondary Education Peshawar. F.Sc (1988) Marks: 802/1100 Division: 1st From Nisar Shaheed College, RisalPur, Affiliated with Federal Board of Intermediate & Secondary Education Islamabad
Professional Qualification	BSC Electrical Engineering (1993) Division: 1st From NWFP University of Engineering & Technology Peshawar Pakistan. MS Electrical Engineering (Power Stream) (2000) CGPA: 3.84 From NWFP University of Engineering & Technology Peshawar Pakistan. MS Electrical Engineering (Communication Stream) (2002) CGPA: 3.87 From George Washington University, Washington DC, USA. PhD Electrical Engineering (2018) From University of Engineering & Technology Peshawar Pakistan.

Experience

- I have worked as a Lab Engineer at GIKI Topi, Swabi. Pakistan, from April 1994 to October 1995.
- I had been working as Lecturer at UET Peshawar since October 1995.
- Worked as a CSA (Community Service Aid) at University Police Department, GWU, Washington DC, USA form August 2000 to January 2002.
- I have been working as Assistant Professor at UET Peshawar Since 2004.
- I was promoted to BPS-20 by the August Syndicate in 2013.
- I was appointed as Associate Professor on 7-5-2019.
- I was appointed as Professor in the Department of Electrical Engineering, UET Peshawar on 13th March 2022 by the August Syndicate.
- I had been working as Semester Coordinator from 2004 to 2016.
- I remained the member of the UET Syndicate continuously for 6 years.
- I remained the member of the UET Finance & Planning Committee For 6 years.
- I have been working as a member of the works committee UET Peshawar for the last 7 years.
- I have been working as a member of the Transport Committee for the last five years.
- Member of the University Purchase Committee for one year
- I have worked as a UET Senate Member
- I have been working as Advisor Students Affairs, UET Peshawar since September 2018.
- I have been working as a member of University Auction Committee since 2019
- I have been working as a Secretary of University Discipline Committee , UET Peshawar since September 2018
- I have been working as a member of University Appellate Committee, UET Peshawar since September 2018
- I have been working as a member of BOS of Sarhad University Peshawar.
- I have been working as a member of BOS of Qurtaba University DI Khan.

	<ul style="list-style-type: none"> • I have been working as a member of purchase committee since June 2020. • I have been working as a member of Auction Committee, UET Peshawar, Since 2020 • I remained the member of National Curriculum Development Committee And developed the curriculum for BSc Electrical Engineering Technology Under the umbrella of National Technology Council and HEC Pakistan.
Languages	Fluent in :- <ul style="list-style-type: none"> ▪ English ▪ Urdu ▪ Pashto
MS Supervisors	I have supervised 15 MS students in the Discipline of Electrical Engineering.
Publications	<ol style="list-style-type: none"> 1. M. I. Khattak, M. Shafi, G. Ahmad, NasimUllah, M. Saleem, “Effects of the Span of the Calibrating Frequency Scan on Resolution of Microwave Electronic Distance Measurements”, Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan Vol. 19 No. IV-2014. 2. R. Amin, M. I. Khattak, R. M. Edawrds, G. Ahmad, K. Shreen, A. Basit, “Design of a Novel UWB Hexagonal Patch Antenna having Three Notched Band Features” Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan Vol. 22 No. II-2017. 3. T. A. Khan, G. Ahmad, M. I. Khattak, R. M. Edwards, M. I. Malik, “ Bandwidth Enhancement through Fractals and Stacking of Microstrip Antenna for Ku-Band Applications” , Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan Vol. 21 No. IV-2016. 4. Gulzar Ahmad, Sahibzada Faheem, AmjadUllah, Waqar Shah, S.M. Majid Ashraf, “COMPARATIVE STUDY OF RELAY PROTOCOLS USING SIMULATION”, J. Engg. and Appl. Sci. Vol. 32 No. 1 January - June 2013 ISSN 1023-862X 5. Nasimullah, Muhammad Irfan Khattak, Muhammad Shafi, Gulzar Ahmad, “A TUTORIAL ON ADAPTIVE ROBUST POSITION CONTROL OF DC MOTOR

USING FUZZY LOGIC COMPENSATION “ , J. Engg. and Appl. Sci. Vol. 34 No. 1 January - June 2015 ISSN 1023-862X

6. Sikandar Afridi, Muhammad Irfan Khattak, Nasim Ullah, Gulzar Ahmad, Muhammad Shafi, “ PERFORMANCE ENHANCEMENT OF FACE RECOGNITION SYSTEM USING PRINCIPAL COMPONENT ANALYSIS MERGED WITH DISCRETE WAVELET TRANSFORMS” J. Engg. and Appl. Sci. Vol. 34 No. 1 January - June 2015, ISSN 1023-862X
7. F. GUL, H. ZAFAR, M. SHER, A. KHATTAK, S. JAN, S. R. HASSNAIN, G. AHMAD, “Performance Comparison of On-demand Single path and Multipath Routing Schemes for MANETs “Sindh Univ. Res. Jour. (Sci. Ser.) Vol. 45 (A-1): 201-206 (2013)
8. G. AHMAD, M. I. BABAR, M. IRFAN, M. ASHRAF, T. Jan, “ A Novel Patch Antenna Design with Slotted Ground Plane for Satellite Communications “ Sindh Univ. Res. Jour. (Sci. Ser.) Vol.49 (004) 767-772 (2017).
9. S. I. SIDDIQUI, G. AHMAD, S. M. FAHEEM, F. ALI, M. ASHRAF, “Performance Analysis of Dual Hop Networks Based on Best Relay Selection “ Sindh Univ. Res. Jour. (Sci. Ser.) Vol.47 (1): 53-56 (2015)
10. N. ULLAH, S. M. ALI, G. AHMAD, F. ALI, S.R. HASSNAIN, “Seismic Qualification of High Voltage Electric Supply Substation Equipment “ Sindh Univ. Res. Jour. (Sci. Ser.) Vol.47 (1): 137-140 (2015)
11. H. A. SHAH, L. HASAN, S. JAN, A. KHATTAK, G. AHMAD, S. R. HASSNAIN, “Understanding Gene Prediction: A Descriptive Analysis “, Sindh Univ. Res. Jour. (Sci. Ser.) Vol. 45 (A-1): 189-194 (2013)
12. Syed Waqar Shah, Mazhar Sher, Talha Khan, Tariqullah Jan, Haseeb Zafar, Syed Riazul Hassanain, Gulzar Ahmad and Majid Ashraf, “An Efficient Algorithm and its Application for Armstrong’s Indirect Method of Conversion of Narrowband FM to Wideband FM: A Valuable Tool For Communication System Designers”, Pakistan Academy of Sciences 51 (3): 193–199 (2014) ISSN: 0377 - 2969 (print), 2306 - 1448 (online)
13. Gulzar Ahmad, Muhammad Inayatullah Babar, Muhammad Irfan , “A Novel Wideband Microstrip Patch Antenna for Satellite Applications” J. Engg. and Appl. Sci. Vol. 36 No 2 (2017)
14. S. Khattak, M. I. Khattak, Z. Barki, G. Ahmad, A. B. Qazi, “Design and Analysis of M-Shape Printed Monopole Antenna for GSP/ISM/W-Lane Applications”, Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan Vol. 22 No. 4-2017. ISSN 1813-1786(Print).
15. Gulzar Ahmad, M. Inayatullah Babar, M. Irfan, Majid Ashraf, Tariqullah Jan, and Syed Waqar Shah, “Bandwidth Enhancement of Patch Antenna through Various Techniques for Ku-Band Application” Proceedings of the Pakistan

Academy of Sciences: A. Physical and Computational Sciences 55 (1): 109–116 (2018) Copyright © Pakistan Academy of Sciences ISSN: 2518-4245 (print), 2518-4253 (online)

16. A. Sultan , G. Ahmad , M. I. Khattak, “The Impact of Truncated Ground Structure on the Parameters of Fabricated Microstrip Patch Antenna”, Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan Vol. 23 No. 1-2018 ISSN:1813-1786 (Print) 2313-7770 (Online)
17. G. AHMAD, M. I. BABAR, M. IRFAN, R. EDWARDS,” Analysis of Patch Antenna with two Different Substrate Materials for Ku-Band Communications” SindhUniv. Res. Jour. (Sci. Ser.) Vol. 50 (002) 303-310 (2018)
18. Farman Ali, Yousaf Khan*, Amjad Ali and Gulzar Ahmad, “Minimization of Nonlinear Impairments and Its Impact on Transmission Performances of High-Capacity Long-Haul Optical Networks” DE GRUYTER, Journal of Optical Communication, July 2018. Impact factor
19. R. U. AMIN, G. AHMAD, M. IRFAN, M.I. BABAR, “A Wide Band EBG Based Microstrip Patch Antenna With Reduced SAR For Wimax Communication” Sindh Univ. Res. Jour. (Sci. Ser.) Vol.50(003) 413-420 (2018)
20. G. AHMAD, A. AHMAD, M. IRFAN, F. ALI,” Improving Parameters of Wearable Antenna Using EBG Structure” Sindh Univ. Res. Jour. (Sci. Ser.) Vol.50(4) 551-556 (2018)
21. Faheem Ali, Muhammad NaeemArbab, Abdul Basit, Muhammad Kashif Khan, Gulzar Ahmad and Muhammad Amir,”SVC Based Voltage Stabilization for Sensitive Agricultural Loads” Sarhad Journal of Agriculture, Volume 35, Issue 1, March 2019.
22. M. B. KHAN, G.AHMAD, M. I. BABAR, F. ALI, “A Simple Rectangular Microstrip Patch Antenna for K & Ku Band Applications Sindh Univ. Res. Jour. (Sci. Ser.) Vol.51(01) 05-10 (2019)
23. Gulzar Ahmad, Asif Sultan, Muhammad Inayatullah Khan Babar, Muhammad Irfan Khattak, “DESIGN OF A PRACTICALLY FABRICATED MINIATURE SIZE PATCH ANTENNA”, NED UNIVERSITY JOURNAL OF RESEARCH - APPLIED SCIENCES, VOL XVI, NO. 2, 43-52, 2019
24. MUHAMMAD IRFAN KHATTAK, MUHAMMAD IRSHAD KHAN, ZAKA ULLAH, GULZAR AHMAD AND AMAD KHAN,”Hexagonal Printed Monopole Antenna with Triple Stop Bands for UWB Applications” Mehran University Research Journal of Engineering & Technology Vol. 38, No. 2, 335-340 April 2019.
25. Gulzar Ahmad*, Asif Sultan, M. Inayatullah Khan Babar, Majid Ashraf, and Tariqullah Jan, “Fabrication and Analysis of a Triple Band Patch Antenna” Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences 55 (3): 45–52 (2018).

26. K. SULTAN, G. AHMAD, A. SULTAN, "Investigations of a Dielectric Resonator Antenna for ISM, WLAN and C-Band Applications" Sindh Univ. Res. Jour. (Sci. Ser.) Vol. 51 (2) 199-206 (2019).
27. **Gulzar Ahmad**, Muhammad Inayatullah Babar, "An Efficient Patch Antenna with Improved Bandwidth for Future Applications" J. Engg. and Appl. Sci. Vol. 38 No 1 (2019)
28. Faheem Ali, Muhammad Amir, Muhammad Iftikhar Khan, Muhammad NaeemArbab, Abdul Basit, Muhammad Kashif Khan, **Gulzar Ahmad** "An SVC based Power Quality Improvement Model for Consumers Connected to Weak Busses in Distribution Systems" J. Engg. and Appl. Sci. Vol. 38 No 1 (2019)
29. Nasir Saleem, Muhammad Irfan Khattak, GunawanWitjaksono and **Gulzar Ahmad**, "Variance based time-frequency mask estimationfor unsupervised speech enhancement" Multimedia Tools and Applications, Springer Science + Business Media, LLC, part of Springer Nature, 2019
30. **GULZAR AHMAD**, ASIF SULTAN, TARIQULLAH JAN, MAJID ASHRAF, AND MUHAMMAD SARIM, "A Novel Low Profile Rectangular Microstrip Patch Antennafor L-Band Applications Using High Permittivity Substrate" Mehran University Research Journal of Engineering & Technology Vol. 38, No. 4, 915-922 October 2019.
31. F. ALI, **G. AHMAD**, S. JAN, S. M. FAHEEM, "Charge Discharge Analysis of a 12-Volt Battery using Radiant Battery Energizer" SindhUniv. Res. Jour. (Sci. Ser.) Vol. 51 (03) 427-430 (2019).
32. A. KHAN, **G. AHMAD**, F. ALI, S. ULLAH, L. GUL "Fabrication of a Low Profile V Shaped Ground Radiation Antenna for IoT Applications" SindhUniv. Res. Jour. (Sci. Ser.) Vol. 51 (04) 639-644 (2019).
33. Sabir Shah, Majid Ashraf , Nasir Saeed, Tariqullah Jan, Ruhulamin Khalil, M. Inayatullah Babar, **Gulzar Ahmad**, and Syed Waqar Shah "Path Loss Model for Future Terahertz Wireless Communication Systems" Proceedings of the Pakistan Academy of Sciences: A. Physical and Computational Sciences 56 (2): 55-65 (2019)
34. **Gulzar Ahmad**, S.W. Shah, S. Ali, F. Ali, "Simulation of Hexagonal Patch Antenna with three Parasitic Artifacts" Journal of Space Technology, Volume 9, Issue 1: 01-08, 2019
35. S. JAN, A. RAUF, R. SAEED, N. M. FANCY, F. Q. KHAN, **G. AHMAD**, K. AZAM, "Monitoring and Controlling Access to Privacy Sensitive Resources of Android System" SindhUniv. Res. Jour. (Sci. Ser.) Vol. 52 (01) 49-56 (2020)
36. **Gulzar Ahmad**, Muhammad Inayatullah Babar, Siddique Ali, Faheem Ali, "A Wideband and Efficient Patch Antenna with Two Different Feeding Mechanisms for Ku/K Bands Applications" Mehran University Research Journal of Engineering and Technology Vol. 39, No. 3, 625-634, July 2020.

	<p>37. M. AHMAD, G. AHMAD, S. JAN, “Design and implementation of MIMO antenna for Ku-band applications” SindhUniv. Res. Jour. (Sci. Ser.) Vol. 52(02) 181-186 (2020).</p> <p>38. Faheem Ali, Muhammad Naeem Arbab, Gulzar Ahmad, Majid Ashraf, Muhammad Sarim, “An SVC controller for Power Quality Improvement of a Heavily Loaded Grid” Mehran University Research Journal of Engineering and Technology Vol. 39, No. 2, 247- 256, April 2020.</p> <p>39. Gulzar Ahmad, Muhammad Bilal Khan, Junaid Bahadar Khan and Faheem Ali, “ Design of a Patch Antenna on different substrates for Higher Frequencies Applications” Journal of Engineering and Applied Science, Volume 39, Issue 1, 94-102, June 2020</p> <p>40. Akhtar Kamal, Morched Derbali, Sadeeq Jan, Javed Iqbal Bangash, Fazal Qudus Khan, Housseem Jerbi, Rabeh Abbasi, Gulzar Ahmad, “ A user-friendly Model for Ransomware Analysis using Sandboxing” Computers, Materials and Continua, Volume 67, no 3, 2021</p> <p>41. Abdul Basit , Muhammad Irfan Khattak, Jamel Nebhen, Atif Jan, Gulzar Ahmad, “ Investigation of external quality factor and coupling Coefficient for a novel SIR based microstrip tri-band bandpass filter” PLoS ONE 16(10), e0258386. Doi: 10.1371/journal, October 25, 2021.</p> <p>42. Syed Abuzar Bacha, Gulzar Ahmad, Ghulam Hafeez, Fahad R. Albogamy and Sadia Murawwat, “ Compensation of Data Loss using ARMAX Model in State Estimation for Control and Communication Systems Applications” Journals Energies, Volume 14, Issue 22, 12th November 2021, PP 1-17.</p>
<p>Conference & Other Journals Papers</p>	<p>43. Muhammad Naveed, Wasim Habib, Usman Masud, Ubaid Ullah, and Gulzar Ahmad, “Reliable and Low Cost RFID Based Authentication System for Large Scale Deployment”, International Journal of Network Security, Vol.14, No.3, PP. 173-179, May 2012.</p> <p>44. Fahad Nawaz, Gulzar Ahmad, Ihsan Ullah, Khalid Javed, Intekhab Khan, Wahab Khan, “ An optimal Home Energy Management System based on Time of Use pricing scheme in Smart Grid”, International Journal of Scientific & Engineering Research, Volume 8, Issue 3, March-2017 , ISSN 2229-5518</p> <p>45. Muhammad Bilal Khattak, Gulzar Ahmad, “Implementation of Routing Protocols of MANETs in VANETs Using Route Analysis”, International</p>

	<p>Journal of Engineering WorksKambohwell Publisher Enterprises ISSN: 2409-2770 Vol. 4, Issue 5, PP. 78-82, May 2017</p> <p>46. Irfan Ahmed, Nasir Ahmad, Hazrat Ali, Gulzar Ahmad, “The Development of Isolated Words Pashto Automatic Speech Recognition System”, Proceedings of the 18th International Conference on Automation & Computing, Loughborough University, Leicestershire, UK, 8 September 2012</p> <p>47. Waseemullah, Gulzar Ahmad, Kamran Ahmad, “A Cost Efficient DC-DC Converter for WirelessSensor Node”, Proc. of the 4rth International Conference on Power Generation Systems and Renewable Energy Technologies (IEEE) September 10-12, 2018, Islamabad, Pakistan</p> <p>48. Riazul Amin, Gulzar Ahmad, and Muhib Ur Rahman, “ COMPACT MODIFIED EBG BASED PATCH ANTENNA FOR WIMAX APPLICATIONS WITH REDUCED SAR”Sci.Int.(Lahore),29(6),1253-1255,2017 ISSN 1013-5316;CODEN: SINTE 8</p> <p>49. Abid Ahmad, Muhammad Farooq, Gulzar Ahmad, Muhammad Amir, Arbab Masood, “A Review on Properties Amelioration of Wearable Antennas”, International Journal of Engineering Works, Vol. 5, Issue 5, PP. 111-115, May 2018</p> <p>50. SunginBehram Khan, Dr. Gulzar Ahmad, Faheem Ali, Farooq Faisal, Irfan Ahmed, Salman Elahi,” Classification Performance of Linear Binary Pattern and Histogram Oriented Features for Arabic Characters Images: A Review” International Journal of Engineering Works, Vol. 5, Issue 4,, PP. 56-60, April 2018</p> <p>49.</p>
Books	I have published a book, “ <i>Basic Electrical Engineering</i> ” in 2019 and another book, “ <i>Electromagnetic Field Theory</i> ” in 2020.
Foreign Visits	<ul style="list-style-type: none"> • Visited USA for pursuing my Ms Degree. • Visited Islamic University of Technology Bangladesh to Attend a Workshop.