

PERSONAL INFORMATION



RUHUL AMIN KHALIL, Ph.D.

📍 Department of Electrical Engineering, Faculty of Electrical and Computer Engineering, University of Engineering and Technology, Peshawar 25120, Pakistan.

📞 (+92) 91 9221419; (+92) 91 5611700 📱 (+92) 346 9191000

✉ ruhulamin@uetpeshawar.edu.pk ; ruhulaminkhalil@gmail.com

PERSONAL STATEMENT

I am a motivated, results-driven individual with a passion for learning fast and delivering. I combine effective communication skills with extensive technical Knowledge of Electrical Engineering, including; Communication and Information systems. I am a team player and look forward to delivering a satisfactory outcome for my organization while working alone or as part of a larger team.

WORK EXPERIENCE

26 Aug 2016–Present

Lecturer (Department of Electrical Engineering)

University of Engineering & Technology, Peshawar (Pakistan)

www.uetpeshawar.edu.pk

Teaching undergraduate courses in Electrical Engineering, and supervising undergraduate students projects.

14 Oct 2019–Present

Batch Advisor for session 2019-2023 (Department of Electrical Engineering)

University of Engineering & Technology, Peshawar (Pakistan)

www.uetpeshawar.edu.pk

Providing facilitation to undergraduate students of batch 2019-2023 regarding courses and credit hours registrations, course projects and study tours.

07 Oct 2019–Present

Member Scholarship Committee (Department of Electrical Engineering)

University of Engineering & Technology, Peshawar (Pakistan)

www.uetpeshawar.edu.pk

Facilitating the undergraduate students in finding the scholarships, including EHSAAS scholarship, Professional Education Foundation scholarship, and Need-based scholarship through Directorate of Student Affairs UET Peshawar.

17 Oct 2016–12 Oct 2018

Focal Person for Prime Minister Laptop Scheme (PMLS) (Department of Electrical Engineering)

University of Engineering & Technology, Peshawar (Pakistan)

www.uetpeshawar.edu.pk

Facilitating the undergraduate and postgraduate students in laptop scheme for talented students offered by Higher Education Commission (HEC) Pakistan.

17 Oct 2016–12 Oct 2018

Focal Person for Prime Minister Fee Reimbursement Scheme for less developed areas (Department of Electrical Engineering)

University of Engineering & Technology, Peshawar (Pakistan)

www.uetpeshawar.edu.pk

Facilitating the undergraduate and postgraduate students in the said scheme offered by Higher Education Commission (HEC) Pakistan.

- 16 Mar 2016–25 Aug 2016 **Lecturer (Department of Electrical Engineering)**
 Gandhara Institute of Science & Technology, Peshawar (Pakistan)
www.gist.edu.pk
 Taught courses that include Electronics, Signals and Systems, Digital Signal Processing, Probability and Random Variables and supervised undergraduate student projects.
- 7 Apr 2016–25 Aug 2016 **Semester Coordinator (Department of Electrical Engineering)**
 Gandhara Institute of Science & Technology, Peshawar (Pakistan)
www.gist.edu.pk
 Worked as semester coordinator to facilitated students' needs, skills and interests with available opportunities. Meets regularly with administration to insure successful work experience placements.
- 2 Jun 2014–15 Mar 2016 **Laboratory Engineer (Department of Electrical Engineering)**
 Gandhara Institute of Science & Technology, Peshawar (Pakistan)
www.gist.edu.pk
 Conduction and demonstration of Lab-experiments to undergraduate students. Instructed and monitored students in the use and care of equipment and materials in laboratory. Observed student's performance, and record relevant data to assess progress. Maintained the hardware used for conduction of experiments in laboratories and recorded it up to date.
- 2 Jul 2012–27 Aug 2012 **Internee (Networking Engineer)**
 EHSAR Foundation, Peshawar (Pakistan)
 Office computers networking, Website programming maintenance, Professional software installation, Office internet maintenance, and Office data base development.
- 4 Aug 2010–4 Oct 2010 **Internee (Electrical Engineer EWSD)**
 Pakistan Telecommunication Company Ltd., Peshawar (Pakistan)
 Switching Basic Architecture, Switch Room maintenance, Basic subscriber administration, Subscriber queries and complaints, Power plant set up and maintenance.

EDUCATION AND TRAINING

- 10 Mar 2017–12 Jun 2021 **Doctor of Philosophy in Electrical Engineering (Communications & Electronics) with CGPA 3.89/4.00**
 University of Engineering & Technology, Peshawar (Pakistan)
 Internet of Things (IoT), Software Defined Networks (SDN), Mathematical Modelling & Numerical Simulations, Affective Computing, Advanced Computer Networking, Machine Learning, Stochastic Processes, Pattern Recognition, Deep Learning, Compressed Sensing, and Applied Signal Processing.
Doctoral Research Thesis:
"Location Awareness in Internet of Underwater Things (IoUT) using signal-of-opportunity approach"
- 6 Oct 2013–20 Oct 2015 **Master of Science in Electrical Engineering (Communications & Electronics) with CGPA 3.62/4.00**
 University of Engineering & Technology, Peshawar (Pakistan)
 Random Signal & Noise, Advanced Digital Signal Processing, Digital Communications, Integrated Services Over Packet Networks, Advanced Electronics, Information and Coding Theory, Computer Networks, Mobile Networking and Research Methodology.
Master Research Thesis:
"Enhancement of speech signals using multiple statistical models"

6 Sep 2008–17 Sep 2013

Bachelor of Science in Electrical Engineering (Communications) with CGPA 3.16/4.00

University of Engineering & Technology, Peshawar (Pakistan)

Basic Electrical Engineering (BEE), Digital Logic Design (DLD), Electronics Circuits, Circuits Analysis, Digital Signal Processing (DSP), Signals & Systems, Communication Systems, Microwave Engineering, Wireless Communications, Control Systems and Digital Communications.

Bachelor Research Topic:

"Intelligent guided-stick for blinds using wireless sensor network strategy"

22 Feb 2015

Certificate for "Continuing Professional Development (0.5 CPD Point)" One day certified training

Abasyn University, Peshawar (Pakistan)

PERSONAL SKILLS

Other language(s)

English

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	B1	C1	C1	B2
IELTS 7.5				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

- Exceptional presentation skills.
- Strong leadership and patience full skills
- Exceptional Communication skills in written and verbal both
- Able to give the best result in pressure situations.

Organisational / managerial skills

Engineering: Signal Processing, Advance Digital Signal Processing, Digital Communications, Communication Systems, Integrated Services over Packet Networks, Information Coding and theory, Wireless Sensor Networks, Computer Networks, Electronics, Mobile Networks, GSM technologies 3G/4G, Smart Grids, Electrical Machines, Automation and Control Systems.

Management: Successfully managed teams for obtaining collective goals for various projects of Academic, Social and Commercial Nature. Have Experience in Philanthropic and Civic Reform campaigns and activities. Held the position of Zonal Rotaract Representative representing RI district 3272 (Pakistan & Afghanistan).

Job-related skills

Software: MATLAB, Electronic Workbench, PSPICE, Dev C++, Proteus, MS office, Photoshop, AutoCAD, Adobe Photoshop and Corel Draw.

Hardware: Electronics Circuits, Integrated Circuits, Microcontrollers, Development boards, FPGAs and DSP-Kits.

RESEARCH PUBLICATIONS

Journal Publications

Ruhul Amin Khalil, Nasir Saeed, Mohammad Inayatullah Babar, Tariqullah Jan, and Sadia Din, "Bayesian Multidimensional Scaling for location Awareness in Hybrid-Internet of Underwater Things", *IEEE/CAA Journal of Automatica Sinica*, September, 2021 (Early Access). **[Impact Factor = 6.171]**

Junaid Bahadar Khan, Tariqullah Jan, **Ruhul Amin Khalil**, Nasir Saeed, and Muhannad Almutiry, "An Efficient Multistage Approach for Blind Source Separation of Noisy Convolutional Speech Mixture", *Applied Science* 2021, vol: 11, no: 13: 5968. **[Impact Factor = 2.679]**

Mohammad Haris, **Ruhul Amin Khalil**, and Nasir Saeed, "Polarization Re-Configurable Antenna with Increase gain for Small Satellites", *Springer-Journal of Electrical Engineering and Technology (JEET)*, June 15, 2021. **[Impact Factor = 1.069]**

Ruhul Amin Khalil, Nasir Saeed, Mudassir Masood, Yasaman Moradi Fard, Mohamed-Slim Alouini and Tareq Y. Al-Naffouri, "Deep Learning in the Industrial Internet of Things: Potentials, Challenges and Emerging Applications," in *IEEE Internet of Things Journal*, vol. 8, no. 14, pp. 11016-11040, July, 2021. **[Impact Factor = 9.471]**

Ruhul Amin Khalil and Nasir Saeed, "Optimal Relay Placement in Magnetic Induction-based Internet of Underwater Things," in *IEEE Sensors Journal*, vol. 21, no. 1, pp. 821-828, January 2021. **[Impact Factor = 3.301]**

Ruhul Amin Khalil and Nasir Saeed, "Network Optimization for Industrial Internet of Things (IIoT)," in *IEEE Sensors Letters*, vol. 4, no. 7, pp. 1-4, July 2020. **[Scopus Cite Score= 1.7]**

Junaid Bahadar Khan, Tariqullah Jan, **Ruhul Amin Khalil**, and Ali Altalbe, "Hybrid Source Prior Based Independent Vector Analysis for Blind Separation of Speech Signals," in *IEEE Access*, vol. 8, issue 1, pp. 132871-132881, 2020. **[Impact Factor = 3.367]**

Ruhul Amin Khalil, Nasir Saeed, Mohammad Inayatullah Babar and Tariqullah Jan, "Towards the Internet of Underwater Things: Recent Developments and Future Challenges", *IEEE Consumer Electronics Magazine*, (Early access article), March 2020. **[Impact Factor = 3.789]**

Ruhul Amin Khalil, Mohammad Inayatullah Babar, Nasir Saeed, Tariqullah Jan and Ho-Shin Cho, "Effect of Link Misalignment in the Optical-Internet of Underwater Things", *Electronics* 2020, vol. 9, no. 4:646. **[Impact Factor = 2.397]**

Ruhul Amin Khalil, Edward Jones, Mohammad Inayatullah Babar, Tariqullah Jan, Mohammad Haseeb Zafar, Thamer Alhussain, "Emotion Recognition Using Deep Learning Techniques: A Review", in *IEEE Access*, vol. 7, issue 1, pp. 117327-117345, 2019. **[Impact Factor = 3.367]**

Kashif Noor, Tariqullah Jan, Mohammed Basher, Amjad Ali, **Ruhul Amin Khalil**, Mohammad Haseeb Zafar, Majad Ashraf, M. Inayatullah Babar, and S. Waqar Shah, "Performances Enhancement of Fingerprint Recognition System Using Classifiers," in *IEEE Access*, vol. 7, issue 1, pp. 5760-5768, 2019. **[Impact Factor = 3.367]**

Sabir Shah, Majid Ashraf, Nasir Saeed, Tariqullah Jan, **Ruhul Amin 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: Physical and Computational Sciences*, Vol.56, No. 2, pp.43-52, 2019. **[X-category]**

S. Shoaib Ullah Shah, Majid Ashraf, **Ruhul Amin Khalil**, Tariqullah Jan, M Inayatullah Babar, S. Waqar Shah, Gulzar Ahmad, "Implementing Enhanced MIMO with F-OFDM to Increase System Efficiency for Future 5G Cellular Networks", *International Journal of Communication Networks and Information Security (IJCNIS)*, Vol.10, No. 2, pp.403-409, 2018. **[X-category]**

Ruhul Amin Khalil, S. M. Majid Ashraf, Tariqullah Jan, Asiya Jehangir, Junaid Bahadar Khan, "Enhancement of speech signals using multiple statistical models", *Sindh University Research Journal (Science Series)*, Vol: 47(3), pages: 519-522, 2015. **[X-category]**

Conference Publications

Ruhul Amin Khalil, Nasir Saeed, Tariqullah Jan, Majid Ashraf, "Multiple Object Localization in Underwater Wireless Communication using the Theory of Gravitation", *25th IEEE International Conference on Mechatronics and Machine Vision in Practice (M2VIP)*, Stuttgart, Germany, 2018.

Tariqullah Jan, Haseeb Zafar, **Ruhul Amin Khalil**, and Majid Ashraf, "A Blind Source Separation Approach Based on IVA for Convolutional Speech Mixtures". *8th Computer Science and Electronic Engineering (CEECE)*, Colchester England, United Kingdom, 2016.

Asiya Jehangir, Mohammad Inayatullah Babar, Nauman Khurshid, **Ruhul Amin Khalil**, Seema Akbar, "EETRNP: Energy Efficient Two Relay Node Routing Protocol for Sensor Networks", *IEEE International Conference on Emerging Technologies (ICET)*, Islamabad, 2012.

Membership

Educational:

- International Graduate Student member of *Institute of Electrical & Electronics Engineers (IEEE)* from 1st July, 2020-till date.
- International Graduate Student member of *IEEE Communication Society* from 1st July, 2020-till date.
- International Graduate Student member of *IEEE Signal Processing Society* from 1st July, 2020-till date.
- International Graduate Student member of *IEEE Consultants Network* from 1st July, 2020-till date.
- International Graduate Student member of *Institute of Electrical & Electronics Engineers (IEEE)* from 1st September, 2018 to 31st December, 2019.
- International Student member of *Institute of Electrical & Electronics Engineers (IEEE)* from 1st September, 2011 to 31st December, 2012.

Social:

- Member Rotaract Club of Peshawar South from 2nd February, 2013 till date.
- District Chairperson for Information Technology from 1st July, 2014 to 30th June, 2015.
- Zonal Rotaract Representative for Islamabad & KP Zone of Rotary International District 3272(Pakistan & Afghanistan) 1st July, 2013 to 30th June 2014.
- Program Manager with "Passionate Youth Development Organization" from 27th January, 2013 to 26th February, 2014.
- President of Rotaract Club of UET Peshawar from 1st July, 2011 to 30th June, 2012.
- Member of Rotaract Club of UET Peshawar from 2nd September, 2009 to 2nd February 2013.

Awards

- Best Judge Award at "TECHNOPHILIA'18", organized by IEEE U.E.T. Peshawar Student Branch, January 2018 at U.E.T. Peshawar, Pakistan.
- Best Social Activist Award for Implementing the project "Technology Impact on Youth", in 2017 by School of Leadership Foundation, Karachi, Pakistan.
- Award for "Support of District Rotaract Representative 2012-13" at 4th Annual Rotaract Conference "DISCON 2014" on 16th & 17th May, 2014 organized by Rotaract District 3272(Pakistan & Afghanistan) at Forman Christian College, Lahore, Pakistan.
- Certificate of Implementation of Social Action Project "Health issues in Pakistan" on 15th May, 2014 by School of Leadership, Karachi, Pakistan.
- Award for "The Best Delegate" at "International Leadership Summit-ILS'13" on 22nd to 24th November, 2013 organized by AAIA GIKI Chapter at Ghulam Ishaq Khan Institute (GIKI), Swabi, Pakistan.
- Special Award for "ROTARACT BULLETIN 2012-13" at 3rd Annual Rotaract Conference "ROTARACON 2013" on 27th & 28th April, 2013 organized by Rotaract District 3272 Pakistan at Nathiagali, Khyber Pakhtunkhwa, Pakistan.
- Award for "Best Rotaractor for year 2012-13" from Nishter Zone at 3rd Annual Rotaract Conference "ROTARACON 2013" on 27th & 28th April, 2013 organized by Rotaract District 3272 Pakistan at Nathiagali, Khyber Pakhtunkhwa, Pakistan.
- Award for "Best Organizer" at 3rd Annual Rotaract Conference "ROTARACON 2013" on 27th & 28th April, 2013 organized by Rotaract District 3272 Pakistan at Nathiagali, Khyber Pakhtunkhwa, Pakistan.
- Award for "Best Organizer" at "PYDO Mega Funfair 2013, Season-II" on 19th & 20th February, 2013 at Reet-o-Riwaaj, Iqra Choke University Town, Peshawar, Pakistan.
- 1st position in "Movie Making Contest" of YURI's Night 2012 organized by Career Development Center of UET Peshawar at Department of Mechatronics, University of Engineering and Technology Peshawar, Pakistan.

References

Prof. Dr. Mohammad Haseeb Zafar

¹Professor at University of Engineering & Technology, Peshawar, Pakistan

²Visiting Research Professor, University of Strathclyde, Glasgow, United Kingdom (UK)

³Professor at Information Technology Department, King Abdulaziz University, Saudi Arabia

Phone # +92-333-8666264

Email: haseeb@uetpeshawar.edu.pk ; mzafar@kau.edu.sa

Prof. Dr. Mohammad Inayatullah Khan Babar

¹Vice Chancellor at University of Engineering & Technology, Taxila, Pakistan

²Professor at University of Engineering & Technology, Peshawar, Pakistan

Phone # +92-321-9076151

Email: babar@uetpeshawar.edu.pk

Dr. Nasir Saeed

¹Associate Professor at National University of Technology (NUTECH), Islamabad, Pakistan

²Post-Doctoral Fellow, King Abdullah University of Science and Technology (KAUST), KSA

Phone # +92-310-9966609

Email: mr.nasir.saeed@ieee.org ; nasir.saeed@nutech.edu.pk

Dr. Tariqullah Jan

Associate Professor and Postgraduate advisor (Communication & Electronics)

Department of Electrical Engineering, University of Engineering & Technology, Peshawar, Pakistan

Phone # +92-336-9155768

Email: tariqullahjan@uetpeshawar.edu.pk