



DR. YASMEEN NAZ PANHWAR

PhD Scholar - Asst. Prof. (BPS - 19)

CONTACT

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Hyderabad, Pakistan

EDUCATION

2017 - 2024

UNIVERSITY OF WOLLONGONG,
AUSTRALIA

- PhD in School of Electrical, Computer and Telecommunication Engineering,

2007 - 2010

MEHRAN UNIVERSITY OF
ENGINEERING & TECHNOLOGY,
JAMSHORO (PAKISTAN)

- Master of Engineering (Communication Systems and Network)

2003 - 2006

MEHRAN UNIVERSITY OF
ENGINEERING & TECHNOLOGY,
JAMSHORO (PAKISTAN)

- Bachelor of Engineering (Electronics Engineering)

SKILLS

- Communication skills
- Organizational / managerial skills
- Excellent Leadership skill
- Resource Person/ Instructor
- Good Mentoring and Teaching Skills
- Good Presentation Skills
- Excellent Event Organizing Skills

PROFESSIONAL SUMMARY

Highly accomplished Assistant Professor with 17 years of academic excellence at Mehran University, progressing from Lecturer to Assistant Professor (grade 19). Following a successful tenure as a Lecturer. Awarded prestigious PhD scholarships, including the Fulbright Scholarship and HEC funding, to pursue advanced research at the University of Wollongong, Australia, where a PhD was successfully completed. Possesses a strong track record of mentoring students, publishing impactful research, and contributing to the academic community. Adept at fostering collaborative learning environments and driving innovation in higher education through the integration of research and teaching. Proven ability to lead, inspire, and achieve excellence in academic and administrative roles.

WORK EXPERIENCE

University of Wollongong, Australia.

FEB 2018-DEC 2020

Lab Demonstrator (Casual Academic)

Job responsibilities include lab demonstration of the following subjects:

- ECTE203 (Signals and Systems)
- ECTE301 (Digital Signal Processing)
- ECTE 344 (Control Theory)
- ECTE441 (Intelligent Control)
- ECTE 442 (Computer Controlled Systems)
- ECTE 471 (Robotics and Flexible Automation)

Mehran University of Engineering & Technology Jamshoro, Sindh, Pakistan

APR 2013-PRESENT

Assistant Professor (Full-time) - (BPS - 19)

Job responsibilities includes Teaching and Academic Duties:

- Design, prepare, and deliver lectures, laboratory sessions, and seminars in core and elective electronics courses.
- Develop curriculum and course materials, ensuring alignment with departmental goals and industry standards.
- Assess and grade student work, providing constructive feedback to enhance learning outcomes.
- Supervise undergraduate and graduate projects, theses, and dissertations.
- Stay updated on educational innovations and incorporate new teaching methodologies.

Research and Scholarship:

- Conduct high-quality research in areas such as semiconductor technology, embedded systems, signal processing, VLSI, or other relevant fields.
- Publish findings in reputable journals and present at national/international conferences.
- Seek external funding through grant applications to support research initiatives.
- Collaborate with industry partners and interdisciplinary teams on innovative projects.

Administrative and Service Duties:

- Participate in departmental meetings, curriculum development, and accreditation processes.
- Mentor and advise students on academic and career planning.
- Contribute to faculty committees and institutional activities.
- Organize and participate in departmental events such as workshops, seminars, and hackathons.

Community Engagement and Professional Development:

- Engage with professional organizations, attend workshops, and keep abreast

PROJECTS

- Master Project/Thesis Co Supervised Grid based localization of multiple fire extinguishing robots in a dynamic environment. (2014)
- Undergraduate Projects/Thesis Supervised/Co-Supervised Tele-manipulation Of Master Slave Robotic Arm Using Data glove (2013).
- Automatic Equation solver with MATLAB implementation (2013).
- Intelligent domestic electricity theft detection and avoidance system (2012).
- Design and Implementation of intelligent energy efficient and industrial process control using conveyor belt via robotic arm (2011-2012).
- Multi featured Unmanned Ground vehicle, (2011).
- Face recognition system for future banking, (2011)
- Energy management system, (2011).
- Industrial building Management System (2010).
- Car Navigation and Security Systems, (2010).
- Personal identification system using Digital Signal Processing, (2009).

MEMBERSHIPS

- Pakistan Engineering Council (P.E.C) registered as Professional Engineer after qualifying “Engineering
- Practice Examination” held on 16 th June 2013.

Mehran University of Engineering & Technology Jamshoro, Sindh, Pakistan

FEB 2008–APR 2013

Lecturer (Full-time) - (BPS - 18)

Job responsibilities include:

- Teaching
- Research
- Academic
- Departmental level activities.

Subject Mentor of different courses at Undergrad level:

- Neural Networks and Fuzzy Logic
- Digital Signal Processing
- Signal Processing
- Feedback Control Systems
- Modern control systems
- Sequential Circuit Design
- Microprocessor and Interfacing
- Electronic Engineering

Subjects taught in Postgraduate Classes:

- Electronic tools and Circuit simulation (Practical)
- Advanced Digital Control (Practical)
- Microprocessor Based System Design (Practical)
- Modern Trends in Electronics System Design (Practical)

Mehran University of Engineering & Technology Jamshoro, Sindh, Pakistan

JUL 2007–FEB 2008

Teaching professional (Internee)

Job responsibilities include:

- Excellent Communication Skill gained through teaching experience and by organizing various events.
- Excellent management and organizational skills gained through by organizing or being part of organizing committees of diverse events like seminars, conference, and competitions at department, national and international level.
- Leadership skill, Student Branch Advisor of IEEE, IMS (Instrumentation & Measurements Society), and
- IEEE, Woman in Engineering (Woman in Engineering) affinity group at Mehran UET, Jamshoro.
- Resource Person/ Instructor
- Instructor in 2-Days MATLAB workshop & Acquaint yourself with the language of Technical computing held on 30th
- September -1st October, 2015 at Department of Electronic Engineering, Mehran UET, Jamshoro.
- Instructor in conducting vocational training STEVTA -Training of Trainers Project under Sind Skills
- Development Project for telecommunication engineering, November 2014 held in Department of Electronic Engineering, Mehran UET.
- Participated as a Resource person in a One Week & MATLAB WORKSHOP organized by Director of continuing Education, held at Mehran University of Engineering & Technology, Jamshoro on 19th -23rd September, 2012

PUBLICATIONS

- Y. N. Panhwar, F. Naghdy, D. Stirling, G. Naghdy and J. Potter, Quantitative Frailty Assessment Based on Kinematic Parameters of Daily Living Activities, 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2020, pp. 4233-4238, doi:10.1109/EMBC44109.2020.9175799.
- Y. N. Panhwar, et al. (2019). Assessment of frailty: a survey of quantitative and clinical methods. BMC Biomedical Engineering 1(1): 7.
- Y. N. Panhwar, F. Naghdy, D. Stirling, G. Naghdy and J. Potter, Quantitative Frailty Assessment Using Activity of Daily Living (ADL), 2018 IEEE 18th International Conference on Bioinformatics and Bioengineering (BIBE), 2018, pp. 269-272, doi: 10.1109/BIBE.2018.00059.
- S. Ansari, F. Naghdy, H. Du and Y. N. Panhwar, Driver Mental Fatigue Detection Based on Head Posture Using New Modified reLU-BiLSTM Deep Neural Network in IEEE Transactions on Intelligent Transportation Systems, doi: 10.1109/TITS.2021.3098309
- N. U. Rehman Malik, A. G. Airij, S. A. Memon, Y. N. Panhwar, S. A. R. Abu-Bakar and M. A. El-Khoreby, Performance Comparison Between SURF and SIFT for Content-Based Image Retrieval 2019
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ACHIEVEMENTS

- IoT based prepaid energy meter with load monitoring feature 2024
- Cardio Vision: Real- Time ECG Image-Based Heart disease Detection using Deep Learning 2023
- One of undergrad project under my supervision has received Financial Grant by one of prestigious entity of my country named National ICT, R&D, by Ministry of Information and Technology, Government of Pakistan. The project title is Tele-manipulation of Master Slave Robotic Arm Using Data glove
- Acquired 3rd POSITION in Research Poster Session for a Research Poster titled as "Neuro- Fuzzy based Intelligent Traffic Control System in "2nd International Multi-Topic Conference, 2012
- Granted "Endowment Fund Scholarship" for being among TOP 6 students in M.E(C.S.N) Post Graduate Studies by Mehran University of Engineering and Technology, Jamshoro Sindh, Pakistan
- Granted MERIT SCHOLARSHIP for being among TOP 03 students Batch in 1st Year, 2nd Year 3rd Year of under Graduate Studies by Mehran UET Jamshoro.
- Received an Award of Appreciation in 3-D Computer Mode Competition sponsored by IT Intellectuals Forum at Mehran UET Jamshoro.
- Received special girls prize for C++ project in 1st AI-khwarzmi Hardware and software Award held at Mehran UET Jamshoro

LANGUAGES

- English (Fluent)
- SINDHI (Fluent)
- URDU (Fluent)

PUBLICATIONS (CONTINUE)

- IEEE International Conference on Signal and Image Processing Applications (ICSIPA), 2019, pp. 214-218, doi: 10.1109/ICSIPA45851.2019.8977732.
- S. F. Memon, I. H. Kalwar, I. Grout, E. Lewis and Y. N. Panhwar, Prototype for localization of multiple fire detecting mobile robots in a dynamic environment, 2016 3rd International Conference on
- Computing for Sustainable Global Development (INDIACom), 2016, pp. 395-400.
- Yasmeen Naz, Sanober Farheen, Saba Baloch (2013). Effective Noise Cancellation Contrivance for Audio
- Signals using Adaptive Neuro-Fuzzy Inference System. Publications in Proceeding of 28th Multi-Topic
- International Symposium, 20th - 21st March, 2013 held in Pearl Continental Hotel Karachi organized by
- IEEEP
- Saba Baloch, Yasmeen Naz, Sanober Farheen (2012). Neuro-Fuzzy based Intelligent Traffic Control
- System, Proceedings of Poster Session, 2nd International Multi-Topic Conference, 28th-30th March, 2012.

PROGRAMMING SKILLS & EXPERTISE

- MATLAB
- Python
- Deep learning and Machine Learning
- Generative AI
- Data Mining

REFERENCE

Dr.Wjiha Shah

Chairperson, Department of Electronic Eng

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Dr. B.S. Chowdhry

Meritorious Professor

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