

Saba Baloch

Office Address

Electronics Department, Mehran University of Engineering and Technology, Jamshoro, Sindh, Pakistan.

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Research interest

Artificial Intelligence, Computer vision, image processing and signal processing

Education

- Universiti Teknologi Malaysia, Ph.D., Electrical Engineering
- Mehran University of Engineering and Technology, Jamshoro
M.E, Communication Systems and Networks
G.P.A **4.0/4.0**
- Mehran University of Engineering and Technology, Jamshoro
B.E, Electronics Engineering
G.P.A **3.94/4.0 (Gold medalist, 1st Position in department)**

Work Experience

- Mehran University of Engineering and Technology Jamshoro
Lab-Lecturer (Electronics Department)
10-01-2007 to 27-01-2008
- Mehran University of Engineering and Technology Jamshoro
Lecturer (Electronics Department)
28-01-2008 to 16-12-2011
- Mehran University of Engineering and Technology Jamshoro
Assistant Professor (Electronics Department)
17-12-2012 to PRESENT

Publications

Saba Baloch, Dr. Javed Ali Baloch, Dr. Mukhtiar A. Unar; **Channel Equalization Using Multilayer Perceptron Networks**, Mehran University Research Journal of Engineering & Technology, Volume 31, No. 3, July 2012.

Research Poster

Saba Baloch, Yasmeen Naz, Sanobar Farheen; **Neuro-Fuzzy based Intelligent Traffic Control System**, Proceedings of Poster Session, 2nd International Multi-Topic Conference, 28th-30th March, 2012

Conference presentations

Yasmeen Naz, Sanobar Farheen, Saba Baloch **Effective Noise Cancellation Contrivance for Audio Signals using Adaptive Neuro-Fuzzy Inference System**, 28th Multi-topic International symposium, 20th-21st March, 2013, held in Pearl Continental Hotel Karachi organized by IEEE

Service Activity

Teaching, research; including supervising and co-supervising undergrad final year projects / theses.

Teaching

Having an experience of more than eight years, I have taught multiple courses in electronics department and also computer systems department. Considered as one of the best teachers in the department, I use an interactive teaching methodology by engaging the students with quizzes, projects and presentations during class. Being fair in assessment and thoroughly grading my students is one of my pros. I have also been assessed by my superiors as well as students with maximum grading.

Courses taught in Undergraduate classes

- Signal Processing
- Basic Electronics
- Bio-electronic instrumentation and measurements

Courses taught in Postgraduate Classes

- Electronic tools and Circuit simulation
- Microprocessor Based System Design
- Modern Trends in Electronics System Design
- Instrumentation & Power Electronics

Administration

Throughout my career I have taken responsibility of many administrative duties, I am also the **in charge of Communication Systems laboratory** at electronics department. Along with that I have been an active member of various organizing committees as listed below

- **Volunteered in Big Event Pakistan April 10th 2015**, arranged a donation camp for 3 days and spent a day with orphanage SOS Jamshoro.
- **Member of stage and registration committee in 4th International Multi-Topic Conference** 11th -13th February 2015 in Mehran UET, Jamshoro, Pakistan.
- **Event coordinator in IEEE Explosion'14**, 14th October 2014 held in Mehran UET Jamshoro.
- **Event organizer in 29th IEEEEP All Pakistan Student's Seminar**, 22nd February 2014 held in Mehran University of Engineering and Technology Jamshoro.
- **Member stage and registration committee in 3rd International Multi-Topic Conference** 18th -20th, 2013 in Mehran UET, Jamshoro, Pakistan.
- **Event coordinator in IEEE PSGWC'13** 23rd – 25th October, 2013 in Mehran UET, Jamshoro, Pakistan.
- **Member** of Internship committee & **Coordinator** in Control engineering, in organizing Summer Internship Program, 2013 held in department of Electronics Engineering.
- Participated as **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.

- **Coordinator** in organizing **MESPEC'12** held on April 19, 2012 in Electronics department of MUET
- **Member of Organizing Committee** in **2nd International Multi-Topic Conference** 28th – 30th March, 2012 in Mehran UET, Jamshoro, Pakistan.
- **Coordinator** in organizing **Techno Fusion Quiz Competition** in **NEX'11**, held on 2nd November, 2011 in Mehran UET, Jamshoro.
- **Coordinator** in organizing **MESPEC'11** held on April, 2011 in Electronics department of MUET
- **Coordinator** in arranging workshop on **“Career advancement: A multi folded approach”** held on 28th March, 2009 at Mehran UET, Jamshoro.
- **Member of Conference Registration Committee** in **1st International Multi-Topic Conference** 11th – 12th April, 2008 in Mehran UET, Jamshoro, Pakistan.
- **Evaluator** in Project competition in SEE'12, PAF KIET Karachi

Undergraduate Theses supervised/co-supervised

- Speech recognition using neural networks
- Design & Implementation Of Low Cost Photovoltaic System.
- Optimizing The Cell Site Planning And Deployment Methodologies In Wi-MAX Networks
- A Remedy For Power Crises “Control, Extraction & Feasible Implementation Of Tidal/ Wave Energy In Pakistan”
- Airfield lights monitoring system
- Interactive Solutions to the Power Crises Via Renewable Energy.
- GSM based Valves Monitoring System
- Study and Market analysis of WiMAX

I have supervised over a dozen projects in inter-departmental and inter-university students project competitions also.

IT/Technology

- I have extensive experience and understanding of **Microsoft office programs** and use them regularly for teaching, research and administrative purposes.
- I am also familiar with many programming languages as **GW-Basic, C, C++, Assembly language and Macro Assembler**. I have learnt many electronic tools during my studies and also used them academically like **Electronic Workbench, MULTISIM, LabVIEW, Circuit Maker, AutoCAD, Visio**.
- I have worked a great deal on MATLAB including the latest version **MATLAB R2015a**. I used MATLAB for my masters' research and also for many projects proceeding it.

Extra curricular activities

- During school, college and university studies I participated and won multiple gaming competitions, including throw ball, net ball and table tennis.
- I am also an avid debater having won many inter-college and national level debating contests.

- I have also remained a freelance writer for “The images” in the leading newspaper of Pakistan “The Dawn”