

## **DR. SANA ARSHAD**

D/o Mohammad Arshad Anwar

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### **OBJECTIVE**

Seeking a challenging and rewarding position in a reputable organization where my skills can be fully utilized while gaining and sharing new experience and knowledge.

### **EXPERIENCE**

#### **NED University of Engineering & Technology, Karachi Designation**

- Assistant Professor (2015 to-date)
- Lecturer 2005 to 2015

#### **Theory Courses Taught**

- Basic Electronics
- Electronics Devices and Circuits
- Digital Electronics
- Digital Integrated Circuits
- Electronics –II
- Integrated Circuits

#### **Practicals Conducted**

- Basic Electronics
- Electronic Devices and Circuits (Electronics II)
- Analog and Digital Electronics
- Electronic Engineering Drawing and Workshop (LabView, MATLAB, Orcad)

#### **Factotum**

- Served as the factotum for Semester Examinations of G.C.T in 2007
- Have been serving as the factotum for Semester Examinations of First year Electronic Engineering students since 2018. This involves the supervision of examination in presence of invigilators and relevant duties.

#### **Class Advisor**

Have been serving as class advisor for first year Electronic Engineering Department since October 2018. This involves all the management work, student consultation, dealing of student scholarship applications, time table design, and management of course files according to Outcome Based Education system (OBE) etc.

#### **OBE Self-Assessment Report**

Contributed in writing one chapter for departmental Self-Assessment Report for OBE system. The chapter focused on departmental faculty, staff, facilities available to them, trainings conducted, grants received by various faculty members etc.

#### **Lab Coordinator**

Served as lab coordinator for department from November 2017 to July 2018. Actively participated in preparation of lab manuals and tasks related to OBE accreditation visit by the PEC.

## **Final year project Coordinator**

Have been serving as final year project coordinator since October 2018. This involves selecting and examining the projects at different stages along with management tasks.

## **WORKSHOP**

Attended the workshop "Teaching the teachers :Basics of Circuit Theory" by Dr. Asad Abidi (Professor, University of California, Los Angeles, Visiting faculty, LUMS) at LUMS, Lahore, 2011.

## **EDUCATION**

### **Technical qualification**

<b>2017</b>	Ph.D in Flexible Low Noise Amplifiers for Software Defined Radio
<b>2006-2008</b>	M. Engg (Micro System Designing) with CGPA of 3.8 from NED University of Engineering and Technology
<b>2000-2004</b>	B.E.(Electronics) from NED University of Engineering and Technology with A-one grade.

## **PUBLICATIONS**

1. **Paper 1 - S. Arshad**, F. Zafar, R. Ramzan, Q. Wahab, "Wideband and Multiband LNAs: State-of-the-art and Future prospects"<sup>1</sup>, *Elsevier Microelectronics J.*, vol. 44, no. 9, pp. 774-786, Sep. 2013.
2. **Paper 2 - S. Arshad**, R. Ramzan K. Muhammad and Q. Wahab, "A sub-10mW, noise canceling, wideband LNA for UWB applications"<sup>2</sup>, *Elsevier Int. J. Electron commun.*, vol. 69, no. 1, pp. 109-118, Jan. 2015.
3. **Paper 3 - S. Arshad**, R. Ramzan, F. Zafar, Q. Wahab "Highly Linear Inductively Degenerated 0.13 $\mu$ m CMOS LNA using FDC Technique"<sup>3</sup>, *IEEE Asia Pacific Conf. Circuits Syst. Proc.*, Ishigaki, Japan, Nov. 2014, pp. 17-20.
4. **Paper 4 - S. Arshad**, R. Ramzan, Q. Wahab, "50-830 MHz Noise and Distortion Cancelling CMOS Low Noise Amplifier"<sup>4</sup>, *Elsevier Integ., the VLSI J.*
5. **Paper 5 - R. Ramzan**, F. Zafar, **S. Arshad** and Q. Wahab "Figure of Merit for Narrowband, Wideband and Multiband LNAs"<sup>5</sup>, *Taylor Francis Int. J. Electron.*, vol. 99, no. 11, pp. 1603-1610, Nov. 2012.
6. **Paper 6 - S. Arshad**, R. Ramzan, Q. Wahab, "Wideband Common Gate LNA With Novel Input Matching Technique", *IEEE Modern Circuits Syst. technologies Conf. Proc.*, Greece, May 2016. doi: [10.1109/MOCAST.2016.7495103].
7. **Paper 7 - S. Arshad**, R. Ramzan, Q. Wahab, "A 2.6 mW Positive Feedback Common Gate LNA for beam-forming applications", *submitted to IEEE Trans. Circuits Syst. -I, Reg. Papers.*
8. **Paper 8 - S. Arshad**, F. Zafar and Q. Wahab, "Design of a 4-6GHz Wideband LNA in 0.13 $\mu$ m CMOS Technology", *IEEE Int. Conf. Electron. Design, Syst. Applicat. Proc.*,

Malaysia, Nov. 2012, pp. 125-128.

9. **Paper 9** - H. Shumail, M. Nisar, T. Muzaffar, S. Arshad and Q. Wahab, "Fully Integrated, Highly Linear, Wideband LNA in 0.13 $\mu$ m CMOS Technology", *Proc. IEEE Symp. Wireless Technology Applicat.*, Malaysia, Sep. 2013, pp. 338-342.
10. **Paper 10** - F. Zafar, **S. Arshad** and Q. Wahab, "Design of a 19-22GHz Wideband LNA in 0.13 $\mu$ m CMOS Technology Using Transmission Lines", *Proc. 14th IEEE Int. Multitopic Conf., Karachi*, 2011, pp. 312-315.

### **SOFTWARES AND LANGUAGES**

- Multisim
- Cadence (Low noise amplifier designing and testing through simulations)
- Advanced Design System (Layout)
- C-Language
- Assembly Language
- Lab view

### **PROJECTS SUPERVISED**

- Design of ground penetrating radar
- Design of prosthetic arm
- Design of a wideband Low Noise Amplifier in 130nm CMOS Technology on Cadence
- Design of Automatic Cloth folding machine