Ibrahim Tariq Javed
House14J, Gulistan Colony,
Rawalpindi, Pakistan
+92-0345-5914252
Ibrahim.tariq@hotmail.com

AREA OF INTEREST

Wireless Communication, Networks, Nano Networks

EXPERIENCE

Mar 13-Present **BAHRIA UNIVERSITY (Islamabad)**

Lecturer (Electrical Engineering Department)

Courses Taught:

1. Electrical Network Analysis
2. Probability and Statistics
3. Circuit Analysis 2

Jan-Dec 2012 **UNIVERSITY OF SOUTH ASIA (Lahore)**

Lecturer (Computer Science Department)

Courses Taught:

4. Introduction to computers
5. Data Communication and Networks
6. Computer Logic Design & Architecture
7. Computer Networks
8. Network Security

Aug-Dec 2012 **LUMS- SBASSE (Lahore)**

Teacher Assistant (Electrical Engineering Department)

Course: **Applied Probability (Graduate level)**

Aug-Dec 2010 **LUMS- SBASSE (Lahore)**

Teacher Assistant Electrical Engineering Department

Course: **Electromagnetic Fields & Waves Course**

Jun-Jul 2009 **NUCES-FAST (Islamabad)**

Internee at Engineering and Robotics lab

EDUCATION

2010-2012 **LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS)**
SCHOOL OF SCIENCE AND ENGINEERING (SBA-SSE)
Master of Science Electrical Engineering

2006-2010 **NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES (NUCES-FAST)**
Bachelor of Science Telecommunication Engineering

2003-2006 **ARMY PUBLIC COLLEGE**
Higher Secondary School Certificate (Pre-Engineering)

2000-2003 **BEACON HOUSE SCHOOL SYSTEM**
O-levels

PROJECTS

- **MS THESIS "Communication in Tera Hertz for Wireless Nano Sensor Networks (WNSN)"**
  Nanotechnology have allowed generation of various Nano scale peripherals that will allow future Nano sensors to sense or stimulate any action, store and process data and most importantly transmit electromagnetic signals in terahertz range (0.1-10Thz). For any of the future Nano sensor applications to exist enabling communication and formation of a network of Nano sensors is necessary. The aim of this thesis is to conduct physical layer channel modeling in terahertz frequency for Wireless Nano sensor networks (WNSN). Path loss has been evaluated for two different mediums air and human body in which most of the future Nano sensor applications will operate. Simplified path loss models have been developed to approximate path loss models for short and medium range Nano sensor applications. Channel capacity has been evaluated for both of these mediums in the presence of molecular noise and molecular attenuation. Pulse based communication chain for WNSN has been developed for bit error rate evaluation in the presence of non-white Molecular noise.

PROJECTS

- **BS Final Year Project "GPS Based mobile navigation System"**
  Developed four wheel robot that was capable of navigating itself autonomously to the specified coordinates while being able to detect and avoid obstacles.
- **Implementation of Incremental Sampling-based Algorithms for Optimal Motion Planning.**
- **GSM-GPS Based Telemetry for Automobiles.**
- **FPGA implementation of Digital piano.**
- **Library Management System C++**

PUBLICATIONS

1. **"Frequency Band Selection and Channel Modeling for WNSN Applications using SimpleNano"** Ibrahim Tariq Javed, Ijaz Haider Naqvi **IEEE ICC 2013**, Budapest, Hungary, June 2013

WORKSHOPS

1. Continuing Professional Development Short Course Series "**Environmental impact assessment**" Pakistan Engineering Council, HQ, Islamabad on 22nd April, 2013.
2. "**Teaching the Teachers: Fundamentals and Advances in Wireless Communications**" organized by the Electrical Engineering Department, UET Taxila from 31st December 2012 to 03rd January 2013 conducted by Dr. Muhammad Ali Imran

AWARDS

2010-2012 **LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS-SBASSE)**
Fully funded Scholarship for Masters in Electrical Engineering

TOOLS

C/C++/C#, MATLAB, Verilog, Wireshark

SKILLS

- Quick Learning abilities
- Research oriented
- Effective Communication Skills