

ENGR. SYEDA AIMEN NASEEM

QUALIFICATIONS

[2018- In-Progress]	PhD in Electronics with course work completion CGPA 3.9 NEDUET University
[2011- 2013]	Masters of Engineering with CGPA 3.84 / 4.0 Specialization in Communication and Signal Processing 1st Position (Gold Medalist) Hamdard University
[2007- 2011]	Bachelors of Engineering in Electronics with CGPA 3.62 / 4.0 1st Position (Gold Medalist) Hamdard University
[2005- 2007]	Intermediate in Pre-Engineering with A-Grade , Karachi Board Govt. Degree Girls College Gulshan-e-Iqbal
[2003- 2005]	Matriculation in Science with A-Grade , Karachi Board Ataturk Public School

WORK EXPERIENCE

[2022-onwards]	NED University Lecturer (Department of Physics)
[2018-onwards]	NED University Ph.D. Scholar (Department of Electronics) (Ph.D. Teaching Load) in semesters for the courses of Basic Electronics, Engineering Drawing, workshop practices, Integrated Circuits, and Electronic Devices Circuits (Pedagogy: Outcome-based Education by Washington Accord)
[2010]	Afroze Textile Industries Pvt. Ltd. Worked in the Department of Research and Development Two months Summer Internship
[2009]	Pakistan Steel Mills (In-Plant Training) Worked in Departments: Engineering Lab, Steel Making Department, Cold Rolling Mill and Iron Making Department Four-Week Summer Internship
[2008]	PIA Engineering Worked in Departments: Electrical Overhaul Shop, Instrument Overhaul Shop, Radio Overhaul Shop, Boeing and Airbus Line and Maintenance Hangers Four Week Summer Internship

MEMBERSHIPS

- Registered Engineer in Pakistan Engineering Council (PEC) ELECTRO/15692
- The Institution of Engineers, Pakistan (IEP)

PUBLICATIONS

- Naseem, S.A., Rehman, A., Uddin, S.Z., Khan, B., Mehmood, Z. and Nisa, M.U., 2023. Counterfeit Recognition of Pakistani Currency. *KIET Journal of Computing and Information Sciences*, 6(1), pp.123-147. **HEC recognized 'Y' Category**
- "An Economical Design of Automatic Rice Grading using Image Processing" in International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-2S9, September 2019 presented in 3rd Asia International Multidisciplinary Conference (AIMC2019) Malaysia Link: [Volume-8 Issue-2S9 - International Journal of Recent Technology and Engineering \(IJRTE\)](#)
- "Cost-effective monitoring system for the early detection of ischemic stroke in smokers" in 2019 International Conference on Information Science and Communication Technology (ICISCT), held on 9-10th March 2019 added to IEEE Xplore on 29 July 2019 DOI: 10.1109/CISCT.2019.8777440
- "Recognition of license Plate for Vehicle Identification." Presented at "International Conference on Computing, Electrical and Electronics Engineering" (ICCEEE-2017)

PROJECTS

FINAL YEAR PROJECT: Optimization of Milling Process Used in Sugar Mills

(This module is a universal model of any milling process that is used in industries)

The concept of the project was Input load regulates the motor speed in such a way that the motor drives a restricted current. The primary goal is to maximize power and preserve energy. This was a microcontroller-based project with a graphical user interface.

Supervised Undergraduate Projects:

- 2012- Biometric Security System – Examination Attendance system using RFID
- 2013- BURAQ- A Segway
- 2014- PLC Based Tinting Machine
- 2015- Scheduled Based Drug Dispatching Machine
- 2017- Automatic Rice Grading using Image Processing (Funded by Ignite)
- 2018- 3D PCAM LIDAR
- 2019- Electrical Vehicle Charger (level-3)
- 2020- Multi-Channel Lithium Battery (18650), Analyzer
- 2021- Level 3 EV Fast Charger
- 2022- An investigation of ionization radiation response on capacitors, resistors and inductors using LINAC

Co-Supervised Postgraduate Thesis:

- 2022 (in progress)- Linearization of Power Amplifier in presence of I/Q imbalance
- 2022 (in progress)- Linearization of Power Amplifier through Digital Pre distortion

CERTIFICATIONS

- Supervised Machine Learning Regression and Classification by Andrew NG- an online non-credit course authorized by DeepLearning.AI and Stanford University offered through Coursera
- One Month Faculty Development Program in NEDUET
- AI for Everyone by Andrew NG- an online non-credit course authorized by DeepLearning.AI and offered through Coursera
- 24-Days technical skill upgradation of teaching staff through workplace-based training delivery supported by TVET Sector and funded by European union and government of Germany and Norway
- One-day workshop on Problem Solving- An Active Learning Approach in Education system at Aga Khan University
- Four weeks' workshop on Professional Development Program at NEDUET
- Instrument Rating Certification on NEXYS-2 Digilent FPGA Spartan-3E Board

Continuing Professional Development Program:

- One-Day Workshop on OBE Software Hands-On practice at Indus University
- One-day Seminar on EEG based Brain Source Localization for Healthcare Applications at Indus University
- A one-day workshop on NI LABVIEW real-time, Lab FPGA programming tools and certified LABVIEW associate developer training at BAHRIA University from Pakistan Engineering Council
- A one-day workshop on FPGA for High Speed and configurable Computing and Digital Signal Processing Application
- One-day short course on Energy Audit tools and techniques from Pakistan Engineering Council
- One-day short course on Environmental Impact Assessment from Pakistan Engineering Council
- One-day short course on Design of Graphical User Interface Application using MATLAB
- Two days' Workshop on PLC Programming
- One-day short course on Big Data Computing (Architecture, Platform and Tool) at Indus University
- One-day short course on How to Write a Technical Research Paper from Pakistan Engineering Council
- One-day short course on Refresher Course on Modern Trends in Control Engineering
- One-day short course on Total Quality Management from Pakistan Engineering Council
- One-day short course on Teaching Engineering Students from Myths to Facts
- One-day short course on Integrated Industrial Automation and Instrumentation Methods in Industry
- One-day Workshop on MATLAB Applications in Image Processing
- One-day short course on Broadcast Engineering What it means
- One-Day short course on Technology Entrepreneurship
- Two days' workshop on Understanding Control Systems using Simulations in MATLAB and SIMULINK

SOFTWARE SKILLS

- 3D- Studio Max
- AutoCAD
- LABVIEW
- MATLAB
- MS Office
- PLC Programming
- SYNAPTICAD and Xilinx (FPGA)
- MICROWIND and DSCH

RESEARCH INTERESTS

- RF Amplifiers
- MIMO systems
- Signal Processing
- Image processing
- VLSI Designs

