

Mohammad Sarfraz

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QUALIFICATIONS:

PhD . University of Salford, Manchester, (ECG signal processing and classification using soft computing Techniques) UK

MS. Intelligence Systems, (Gene Expression Data from Microarrays), **Sunderland Univeristy,UK.**

B-Tech (Electrical Engg.) H.B.T.I, Kanpur. (1st Class)

RESEARCH INTEREST: Bio Signal analysis, Pattern Recognition in biomedical application , Intelligent System Design ,Measurement and Instrumentation, artificial intelligence application to Bioinformatics, Independent component Analysis.

EXPERIENCE:**Lecturer Salman bin Abdul Aziz University Feb 09 – continuing**

Lecturer, Electrical Engineering Department , College of Engineering, Salman bin Abdul Aziz University, Saudi Arabia February 2009—Till Date.

Currently, I am working as a Lecturer in Electrical Engineering Dept. taking courses of Electrical Circuits, Electrical Measurements and Instrumentations, Sensor technology also involved with the research group in various projects.

Senior Lecturer IIT. Ghaziabad Oct-07-Jan 09

Worked as a Senior Lecturer in Electrical Engineering Deptt. Ideal Institute of Technology, Ghaziabad, India. Taught Neural Network & Fuzzy Logic, Power System, Electrical Measurement & Instrumentation, and also conducting Lab for Numerical Analysis using Matlab Software, Lab for Instrumentation using LABVIEW software.

- Lab Developer In charge of
 - 1) Power System Lab
 - 2) Numerical Technique Lab (Matlab, Labview, Pspice).
- Also conducting Faculty training course in Neural and fuzzy logic applications.
- Worked with Shahzad Mukhtar of Yorkshire college U.K on Intelligent Systems.
- Worked as Uttar Pradesh Technical University Examiner.

Lecturer BIT, Meerut Feb-07-Sep-07

Worked as a Lecturer in Electrical Engineering Deptt. Bharat Institute of Technology, Partapur, India. Teaching Electrical Power System also conducting Lab for Numerical Analysis using Matlab Software.

Capita Group Sheffield, United Kingdom, Sep2005 – Jan2006

Worked for Curry's customer support through Blue Arrow recruitment agency. Responsibilities include call handling, answering technical queries and achieving the call handling time target. One of the main responsibilities was to make the customer feel satisfied not only in technical means but also by economic means.

RGIS Inventory Specialist, United Kingdom, Jan 2005 – Aug2005

I worked for RGIS Inventory the latest and most advanced systems Specialist, world largest Inventory Company, US based, Duties involved managing the site, using the latest and most advanced system audit microcomputer.

Lecturer SSIT&M, Aligarh May 2003- Oct2004

Worked as a Lecturer in Electrical Engineering Deptt. Shivdan Singh Institute of Technology, India. The Teaching Electrical Power System also conducts Lab for Numerical Analysis using Matlab Software.

Publications & Research:

1. McGarry, K., Sarfraz, M., & MacIntyre, J. (2007). Integrating gene expression data from microarrays using the self-organising map and the gene ontology. In *Pattern Recognition in Bioinformatics* (pp. 206–217). Springer. Retrieved from http://link.springer.com/chapter/10.1007/978-3-540-75286-8_21
2. Mrabet, B., & Sarfraz, M. (2012). Study and Design of electronic ballast for discharge lamp based on high frequency resonant inverter and current feedback control. In *Light Sources 2012* (pp. 165–166). Troy, New York, USA: FAST-LS Ltd. UK.
3. Sarfraz, M., & Li, F. (2013). Independent Component Analysis for Motion Artifacts Removal from Electrocardiogram. *Global Perspectives on Artificial Intelligence*, 1(4). Retrieved from <http://www.seipub.org/gpai/paperInfo.aspx?ID=10036>
4. Sarfraz, M., Li, F., & Javed, M. (2011). A comparative study of ICA algorithms for ECG signal processing (pp. 135–138). Retrieved from <http://dl.acm.org/citation.cfm?id=2007079>

5. Sarfraz, M., Li, F., & Javed, M. (2013). A Blind Source Separation Method to Eliminate Noise Artifacts in ECG Signals (Vol. I, pp. 112–119). Presented at the 2nd INTERNATIONAL CONFERENCE ON RECENT TRENDS IN COMPUTING, Ghaziabad, India.
6. Sarfraz, M., Li, F., & Khan, A. A. (2014). Independent Component Analysis Methods to Improve Electrocardiogram Patterns Recognition in the Presence of non-Trivial Artifacts. In *ICBBS 2014* (Vol. III). Copenhagen, Denmark.
7. Sarfraz, M., & Mukhtar, S. (2008). Collision detection system using Radial basis function network (pp. 82–86). Presented at the National Conference on Engineering Technology for Sustainable development, Ghaziabad, India.
8. Sarfraz, M. (2001). Quantum Computers. Presented at the All India student Technical Seminar, Sultanpur, India: IEEE, KNIT Chapter.
9. Sarfraz, M. (2002). Wireless Transmission of Electrical Power. Presented at the XX All India Academic Week, Pilani, India: BITS, Pilani.

Seminars Presented:-

- Development of Hybrid system for short term load forecasting, (Ideal Institute of Technology, Dec 07).
- Scope of Soft Computing in Electrical Engineering.(Bharat Institute of Technology, Sep 07).

Seminars Attended:-

- Short Term Course on “Matlab Application in Engineering” at G.L Bajaj Institute of Management & Technology, 25-26 April 2008.

COMPUTER SKILLS: C++, Matlab, VB, Prolog, Genesis, Data Mining Tools.

LANGUAGES KNOWN: Proficient in English, Hindi, and Urdu, Arabic reading.

PROFESSIONAL SKILL: U.K Certified in Standard Industrial Operation and 5S Workplace Organisation. GATE Score: 87%, Member IET, U.K

ENGINEERING & OTHER PROJECTS:

1. *Deanship for Research Salman bin Abdulaziz University Projects.*

- a) Dr Ibrahim Mrabet , Mohammad Sarfraz , Study and Design of electronic ballast for discharge lamp based on high frequency resonant inverter and current feedback control , Budget 40000 SAR.
 - b) Dr Aslam Amir ahmed , Mohammad Sarfraz, Mode Choice Modeling Using Artificial Neural Networks and Fuzzy logic , Budget 50000 SAR
2. MS Project:- Analysing gene expression data generated from Micro-arrays using self-organizing map (SOM), Project involved identification and visualization of meaningful clusters in cancer data set for analysis. Accepted at Second International Conference on Natural Computation (ICNC'06) and the Third International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'06).
 3. B-Tech: - Power Quality Parameters Sensing, Using Microprocessor (Smart System Operation), (Simulation on MATLAB Software).The objective was to sense the Power Quality Parameters if exceeding the specified range alarming signal should be indicated through LED.
 4. Power Transformer Design.Objective was to design the 3 Phase Power Transformer for a desired output of 5MVA for Power applications. (For Local Industry).
 5. Application of Neural Network in short term load forecasting. Objective was to design a Matlab based program for short term load forecasting based on the concept of time series prediction.
 6. Voltage Control Areas in Power System.The objective was to study the promising concept of Voltage control area in today's Power system analysis. The study was based on New England and UP-75 bus Systems.

HONORS:

1. Awarded 2nd Prize for Paper Presentation at All India Academic Week.
2. Scored High Score In **GRE, TOEFL, IELTS and UK NARIC Certified.**
3. Best model award in science exhibition (Smart System).
4. Received a good team worker award in organizing a workshop at All India Technical Conference.
5. Received best paper award at National Conference on engineering technology for Sustainable development.

SOCIETY MEMBERSHIP:

1. **Member of Institution of Engineering & Technology, United Kingdom.**
2. **Member of ISTE, India.**
3. **Member IEEE.**

