

CURRICULUM VITAE

NAME: **Dr. Zulfiqar Ali Memon**

ADDRESS:

Ajman University of Science and Technology,
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OBJECTIVES:

Use my knowledge and experience towards the promotion of engineering education and transfer my knowledge to the students.

ACADEMIC QUALIFICATIONS:

1987-1991 Ph.D.

(Automation & Robotics)
Brunel University of west London, Uxbridge,
Middlesex UB8 3PH, England

1982-1986 B.Eng.

(Electrical) "A" Grade (1st Position)
Mehran University of Engineering &
Technology, Jamshoro, Pakistan

PROFESSIONAL QUALIFICATIONS:

Member of Institute of Electrical Engineers (MIET), UK.
The Council of Chartered Engineering Institutions UK **C.Eng. (UK)**
Senior Member of Institute of Electrical and Electronics (SMIEEE) USA
Member of Institute of Electrical Engineers (Pakistan).
Member of Engineering Council (Pakistan).

WORK EXPERIENCE:

Aug. 2009- to date

Assistant Professor,
Ajman University of Science and Technology,
Ajman

Sep.1999- June 2009

Assistant Professor,
Khalifa university of science technology and research,
Sharjah.(formerly known as ETISALAT university college)

Oct.1996- Aug 1999

Lecturer,
ETISALAT College of Engineering
Sharjah.

Feb.1995- Oct.1996

Lecturer/Senior Research fellow
Brunel University, Uxbridge,
Middlesex UB8 3PH
UK

Aug. 1994 - Feb.1995

Assistant Professor
Dawood College of Engineering &
Technology, Karachi, Pakistan

Dec.1993- Aug. 1994

Research Consultant
Brunel University, Uxbridge,
Middlesex UB8 3PH
England

Aug.1991-Dec.1993

Associate Professor
Pakistan Navy Engineering College

P. N. S Jauhar, Karachi, Pakistan.

Aug. 1991-Dec.1993

Visiting Professor
Dawood College of Engineering &
Technology, Karachi, Pakistan.

Jan. 1988-Apr.1991

Demonstrator at Brunel University

April 1987- Oct.1987

Assistant Electrical Engineer
Karachi Electric Supply Corporation
Karachi, Pakistan.

ADMINISTRATIVE AND OTHER EXPERIENCE:

DEC.1993 - Aug.1994	In-Charge of research team (TROJAN PHASE 2), Brunel university UK.
Feb.1995 - Oct.1996.	Project Manager (TROJAN PHASE 3) Developing Microelectronics Circuit Breakers, Brunel university UK.
Feb.1995 - Oct.1996.	Member of curriculum development committee, Brunel University UK.
1997-1999	Member of curriculum development committee, Etisalat college of Engineering Sharjah.
2001-2002	Member of Resources committee, Etisalat college of Engineering Sharjah.

2000-June 2009	Personal tutor coordinator, Khalifa University (KUSTAR) Sharjah.
Feb. 2007-June 2009	Year coordinator, Khalifa University (KUSTAR) Sharjah.
June. 2010- to date	External training coordinator Ajman University of Science and Technology.

Courses taught:

- Instrumentation and measurement.
- Control Engineering.
- Signals and Systems.
- Microprocessor.
- Matlab and Simulation
- Electrical Circuits.
- Analog and Digital Electronics.
- Electrical Machines.
- Power Electronics.
- Industrial Electronics,
- Mechatronics.
- Robotics.

LABS CONDUCTED:

I have been conducting different Labs at different levels of degree program through out my teaching career.

- Analog and digital Electronics
- Measurements
- Control
- Electrical machines
- Microprocessor
- Electrical circuits

SENIOR LEVEL PROJECTS:

Supervised many senior level projects in the field of Instrumentation and control using PLCs for controlling different devices.

- Sensor fusion.
- Smart homes.
- Industrial Electronics,
- Digital control.
- Electro magnetics.
- Magnetoresistive Thin film Sensors,
- Residual Current Devices using Thin Film Technology,
- Industrial Robots.

RESEARCH INTEREST:

- Fractional order control.
- Digital control.
- Sensor fusion.
- Magnetoresistive Thin film Sensors.
- Residual Current Devices using Thin Film Technology.
- Electro magnetics.

TRAINING:

- Post graduate training: Real time systems incorporating design and implementation of real time systems, system-interfacing, real time data acquisition systems.
- Semiconductor Fabrication Technology: The use of sputtering equipment, photolithography techniques, design of sub-miniature pattern of thin film devices; deposition and analysis of ultra thin films, designing PC controlled automated equipments.
- Finite Element analysis, PC-Opera, (For Electro Magnetic and Electro Static Modeling, Simulation and analysis).
- e-learning

REFEREED JOURNAL PAPERS

1. "Comparative analysis of dish Stirling engine and photovoltaic technologies: Energy and economic perspective", Ahmed Billal Awan, **Zulfiqar Ali Memon**, *Sustainable Energy Technologies and Assessments*. April 2021.
2. "Adaptation of Grid Tied Photovoltaic (GT-PV) System as Retrofit Renewable Energy Model for Single-Family House in UAE". A.H. Chohan, **Z.A. Memon**, A.I. Che-Ani, M.S. Arar, J. Awad, *International Journal of Integrated Engineering*. Issue 1, 2021.
3. "An Innovative PID Controller in Conjunction with DC Electric Motor for Control of Hybrid Electric Vehicle, M Majid Hussain, **Zulfiqar A Memon**, M Akmal Chaudhary, M Siddique. *International Journal of Electrical and Electronics Engineering (IJEET)*. issue 7, 2020.
4. "Power balancing of grid connected PV system based on MMC under different irradiation conditions", Safia Babikir Bashir, Hasan A. Zidan, **Zulfiqar Ali Memon** *International Journal of Electrical Power and Energy Systems*, 117, 2020.
5. "Three-step Iterations for Variational-like Inequalities". M. A. Noor, **Z. Ali Memon**. *International journal of pure and Applied Mathematics*, Volume 21, NO: 1 2005, 35-42.
6. "Regularized General Variational Inequalities" M. A. Noor, K. I. Noor, **Z. Ali Memon**. *Nonlinear Analysis Forum* Vol.9 (1), June 2004. pp 55-63.
7. "Stability of Implicit Resolvent Dynamical Systems". M.A Noor K. I. noor and **Z. Ali Memon**. *Journal of mathematical Inequalities & Applications*. Volume:6, Number 3, July 2003, pp 553-562
8. "Algorithms for General Mixed Quasi Variational Inequalities". M.A Noor and **Z. Ali Memon**. *Journal of Inequalities in pure and Applied Mathematics*, Volume 3, Issue 4, Article 59, 2002. pp 1-7.
9. "Implementation of Guard-Based Feedback Pico-Ammeter". **Z.A.Memon**, B.S.Chowdhry, M.I. Bhatti. *Sindh University Research Journal* Vol.27.No.1 1995. Pp,27-37.
10. "Magnetoresistive Sensors for Multitrack Information retrieval system". **Z.A.Memon**, B.S.Chowdhry, M.I. Bhatti. *Sindh University Research Journal* Vol.26.No.1 1994.
11. "Serpentine Magnetoresistive Elements for Tactile Sensor Applications". **Z.A.Memon**, P.Adh, R.T.Rakowski, D.J.Mapps. *IEEE Trans. Mag.* Vol.26, No.5, September 1990 pp.2047-2050.

INTERNATIONAL CONFERENCE PROCEEDINGS

1. Muhammad Akmal Chaudhary, **Zulifqar Ali Memon**, Zubaida Yusoff†, Jonathon Lees, Johannes Benedikt, Paul Tasker
“Characterization of Baseband Electrical Memory in Microwave Devices using Enhanced Multi-tone Measurement System”
International conference on computing, Electronic and Electrical Engineering (ICE CUBE) April 2016.
2. Muhammad Akmal Choudhary, **Zulfiqar Ali Memon**, Jonathon lees
“Investigation of Baseband Electrical Memory Effects on the Dynamic Charecteristics of Power Transisters”. INMIC, Lahore Pakistan 16 December 2013.
3. "Fractional-Order Power System Stabilizer" Reyad El-Khazali*, Z. A.Memon**, Nabeel Tawalbeh***4th IFAC Workshops on Fractional Differentiation and its Applications FDA'10, Badajoz Madrid Spain, October 18-20, 2010
4. “Noise performance of fractional-order phase-locked loop” R. El-Khazali, W. Ahmad, Z. Ali Memon. ICSPC07, Dubai, U.A.E 24-27 November 2007.
5. “An Intelligent Autopilot For a Container Ship ” . **Z. Ali Memon**, M. Ali Unar, A.Q. Rajput. ICMSAO/05-1, Proceedings of the first International Conference on Modeling, Simulation and Applied Optimization, Sharjah, U.A.E. 1-3 February 2005.
6. “Linear Magnetic Sensor Based ON OFF-Diagonal Magnetic Impedance in Amorphous Wires” . S. Sandacci, D.P. Makhnovskiy, L. V. Panina, M.A. Akhter. **Z.Ali Memon**. ICECS 2003, 10th IEEE international conference on Electronics, circuits and Systems, 14-17 Dec. 2003, sharjah United Arab Emirates. pp 1200-1203.

7. "MATLAB Based Training Toolbox for Controller Design" **Z. Ali Memon** and B.A Majeed. Proceedings of the first International conference. A Millennium Dawn in Training and Continuing Education, University of Bahrain, April 2001, 239-244.
8. "Training and Development of Control Engineers: The Role of the IEC-61131-3 Standard" B.A Majeed and **Z. Ali Memon**. Proceedings of the first International Conference. A Millennium Dawn in Training and Continuing Education, University of Bahrain, April 2001, 183-186.
9. "A novel Residual current Device (RCD) utilising Artificial Neural Networks". P.Adh, **Z.A.Memon** and R.T.Rakowski. Eurosensors XIV. The 14th European conference on solid-state transducers. August 27-30, 2000, pp537-540.
10. "High Sensitivity Magnetoresistive residual Current Sensor with Overload protection for use in Safety Critical Systems" P.Adh, R.T.Rakowski, **Z.A.Memon**, S.C. Powel, C.Tylor. The 1999 Sensor & Transducer Conference BRIMINGHAM UK, FEBRUARY 17th, 1999. pp1-9.
11. "A Magneto-Optic Residual Current Sensor for Direct Current applications" P.Adh, **Z.A.Memon**, B.E.Jones, L.M.Martinez, International Conference on Trends in Industrial Measurement and Automation, MADRAS, INDIA, January 3-7 1996.
12. "A Magnetoresistive Current Sensor for Line Current Monitoring Applications" P.Adh, R.T. Rakowski, **Z.A.Memon**, S.C.Powel, International Conference on Trends in Industrial Measurement and Automation, MADRAS, INDIA, January 3-7 1996.

13. "Design of a magneto-optic sensor for a residual current device"
L.M.Martinez, P.AdI, **Z.A.Memon**, B.E.Jones,. 6th International
Conference on Industrial Metrology. ZARAGOZA, SPAIN,
OCTOBER, 25-27, 1995.
14. "A Magnetoresistive Current Sensor for Industrial Current Monitoring
Application" P.AdI, R.T.Rakowski, **Z.A.Memon**, S.C. Powel. 6th
International Conference on Industrial Metrology. ZARAGOZA,
SPAIN, OCTOBER, 25-27, 1995.
15. "Robot Handling of Food Products". **Z.A.Memon**, P.AdI,
R.T.Rakowski. Conference on Sensors and Their Applications V,
Edinburgh, Institute of Physics (IOP), September, 22-25 1991.
16. "Serpentine Magnetoresistive Elements for Tactile Sensor
Applications". **Z.A.Memon**, P.AdI, R.T.Rakowski. International
Conference on Magnetism (IEEE), Brighton, April 1990, Poster.
17. "Tactile Sensor for Normal and Shear force Detection". P.AdI,
Z.A.Memon, R.T.Rakowski. International Workshop, on Sensorial
Integration for Industrial Robots, Architecture and Applications,
ZARAGOZA, SPAIN. November, 22-24,1989.
18. "Handling Objects of Unknown Characteristics". P.AdI, **Z.A.Memon**,
R.T.Rakowski. 6th Symposium on Information Control Problems in
Manufacturing Technology, MADRID. September 26-29, 1989.

BOOK (CONTRIBUTION)

"Robot Handling of Food Products". AdI, Memon, Rakowski
published in "Sensors: technology, systems and applications", the
Adam Hilger series on Sensors. IOP publishing Ltd., pp511-517, ISBN
0-7503-0157-0.

REVIEWER:

International Journal of Computer-Integrated Manufacturing.

10th IEEE international conference on Electronics, circuits and Systems.

Tencon '05-IEEE Region 10 Conference'.