**Dr. Ali Saleh AlMejrad**

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**EDUCATION**

1990-1996 : Ph.D. Research

Subject : Biomedical Engineering and Instrumentation

Degree : Ph.D.

University : Faculty of Medicine , Edinburgh University , U. K.

1988-1989 : M.Sc. Course and Research

Subject : Bioengineering

Degree : M.Sc.

University : Bioengineering Unit , Strathclyde University , U. K.

1982-1987 : B.Sc. Course and Research

Subject : Electrical Engineering

Degree : B.Sc. with First Honours Degree

University : College of Engineering, King Saud University , S. A.

**ACADEMIC EXPERIENCE**

1987-1988 : Demonstrator

Teaching courses ( Analog and Digital Electronics) and supervising in labs

2007-2010 : Department Head

Biomedical Technology Dept., College of Applied Medical Sciences

King Saud University

1996-Present : Teaching courses

Biomedical Technology Dept., College of Applied Medical Sciences

King Saud University

**PRACTICAL EXPERIENCE**

- Analog and Digital Electronics

- Computers : BASIC , FORTRAN , PASCAL, G and C programming languages. MSDOS ,

Windows 98, XP, W7, UNIX Operating Systems. OOP, CAD , Matlab and other special Software.

- MCU Systems

- Data Acquisition and Computer Interfacing

- Signal Processing ( Software and Hardware)

- Medical Imaging and Image Processing

- Medical Ultrasound Instrumentation

**PROFESSIONAL DEVELOPMENT**

* Advanced E-learning workshop, The national center for E-learning and Dist. learning, Malysia
* ‘SPSS-I’ workshop, Deanship of Skills Development, KSU
* ‘SPSS-II’ workshop, Deanship of Skills Development, KSU
* ‘Preparatory week teaching’ workshop, Deanship of Skills Development, KSU
* ‘The role of learning & teaching centers in the development of university education’ workshop, CELT, KSU
* ‘Opportunities of success in obtaining a patent’, KSU
* ‘Smart classrooms and interactive whiteboard’, Deanship of e-learning and distance learning, KSU
* E-learning and distance learning , Deanship of e-learning and distance learning, KSU

**SERVICE ACTIVITIES**

**Committee Member**

Scientific Research & Community Service Committee, Biomedical Technology, KSU

Laboratory Committee, Biomedical Technology, KSU

Graduate Studies Committee, Biomedical Technology, KSU

Graduates Committee, Biomedical Technology, KSU

**HONORS AND AWARDS**

1st honour degree B.Sc in EE- 1978

Best Personal Site in CAMS- 2008

1st & 2nd Best Departments Sites in University-/2008.

Best Biomedical Instrumentation Paper Award, AROB, Japan, 2010

**RESEARCHES AND DEVELOPMENTS**

- Development of Signal Processor to be used for Blood Cell Volume Analysis

- Development of Microcomputer Based Medical Ultrasound Systems

- Development of Biomedical Signals Simulator

- Development of Biomedical Virtual Systems

- Development of Biomedical MCU Based Systems

**RESEARCH INTERESTS**

Design and Development of Medical Instrumentation; Use of Fiber-Optic Technology in Medicine, Medical Ultrasound Systems (Imaging and Doppler ) and Quality Assurance ; Design of Microcomputer Based Medical Instruments ; Design of MP & MCU Based Medical Instruments; Biomedical Signal and Image Processing.

**PUBLICATIONS**

**Journals & Conferences**

- AlMejrad, Development of Signal Processor to be used for Blood Cell Volume Analysis, Strathclyde University, Glascow, Scotland, UK, 1989.

**- AlMejrad, Development of Medical C-Scan Ultrasound Systems, , Edinburgh University, Scotland, UK, 5 July 1994.**

- AlMejrad, Development of Microcomputer Based Medical Ultrasound Systems, **, Edinburgh University, Scotland, UK,** 1994

- AlMejrad, Development of Biomedical Signals Simulator, KSU, 1997

**- AlMejrad, Structure of Medical Devices used for Therapeutic and Monitoring Purposes,Third Adminstrative Symposium, Taif, S,.A. , 12-14 Oct. 1997.**

**- Al Mejrad, A Proposal of a Management Structure of Medical Devices Used for Clinical Purposes in Saudi Hospitals, Third Administrative Symposium, Taif, S.A., 12-14 Oct. 1997.**

**- Al Mejrad, Development of a new program in biomedical instrumentation technology Colleges, 23rd Annual International Conference, Medicine and Biology Society,**  [**Technology**](http://ieeexplore.ieee.org/xpl/RecentCon.jsp?punumber=7934)  **25-28 Oct. 2001, Vol 4, pp: 4011 – 4012.**

**- Ali Saad, Ali El Zaart and Ali Al-Mejrad, Speckle Reduction in Digital Ultrasound Images by Multi-Resolution Contrast Enhancement, International Conference on Biomedical Engineering 2004, IFMBE, BioMed 2004,  Kuala Lumpur, Malaysia, September 2-4, 2004.**

**- Ali El Zaart,  Ali Al-Mejrad and Ali Saad, Segmentation of Mammography Images for Breast Cancer Detection. International Conference on Biomedical Engineering 2004, IFMBE BioMed 2004, , Kuala Lumpur, Malaysia, September 2-4, 2004.**

- Ali AlMejrad, A Feasibility Study of Establishing a Laboratory for Calibration and Evaluation of Biomedical Equipments in Academic Environment, Saudi Health 2 Exhibition, 21-24 April 2008, Riyadh, KSA.

- N. AlShammari, C Neal-Sturgess, A Hassan & A. AlMejrad, Modelling Human Body Movement in Road Accidents and Consequences for the Cervical Spine, SIIC2008, Saudi International Innovation Conference 2008, UK, 9-10 June 2008.

**- A. AlMejrad,** A Current Status of Biomedical Instrumentation Education Training & Future for Graduates in the Kingdom, The 2nd Saudi Conference for Health Education & Training, Riyadh Military Hospital, Riyadh, 19-21 January 2009.

- A. AlMejrad, Design of intelligent system for speech monitoring and treatment of low and excessive vocal intensity, 15th Artificial Life and Robotics AROB Symposium, Beppu, Oita, Japan, Feburary 4-6, 2010.

- Mohamed Rizon, Chai Tong Yuen, Ali AlMejrad and Naif Alajlan, Real-Time Iris Detection, 15th Artificial Life and Robotics AROB Symposium, Beppu, Oita, Japan, Feburary 4-6, 2010.

- M. Murugappan, Mohamed Rizon, R. Nagarajan1, Ali S. AlMejrad and S. Yaacob,, Comparison of Human Emotion Classification through different set of EEG channels, 15th Artificial Life and Robotics AROB Symposium, Beppu, Oita, Japan, Feburary 4-6, 2010.

- A. AlMejrad, Design of intelligent system for speech monitoring and treatment of low and excessive vocal intensity, Journal of Artificial Life and Robotics Vol.15, 2010.

- Mohamed Rizon, Chai Tong Yuen, Ali AlMejrad and Naif Alajlan, Real-Time Iris Detection, Journal of Artificial Life and Robotics Vol.15, 2010.

- Naif Al Shammari, Ahamedali Hassan, Clive Neal-Sturgess and Ali Al Mejrad, Mechanism of Spinal Injuries Sustained by Drivers of Passenger Cars During Collisions with Camels, the 14th International Conference on Biomedical Engineering (ICBME) 2010, 1-6 August 2010, Singapore.

- H.S.Ranu and Ali AlMejrad, Normal and Prevention of Pedal Sequelae in Diabetic Patients: a 3-D Pressure Pattern Analysis, ASME 2010 International Mechanical Engineering Congress & Exposition, Nov. 12-18, 2010, Vancouver, British Columbia, USA.

- N. K. Al-Shammari, A.A. Hassan, C.N.Sturgess and A.S.AlMejrad , Accident Reconstruction of Some uncommon Spinal Injuries in Auto-crashes in the Kingdom of Saudi Arabia, Saudi Med. J., vol. 32 No. 4, 2011.