

Dr. Eldaw E. Eldukhri

Curriculum Vitae

Profile:

Dr. Eldaw E. Eldukhri is **Associate Professor** at College of Engineering, King Saud University, Kingdom of Saudi Arabia. Before Joining King Saud University on January 2016, he was Senior Research Fellow (=Senior Lecturer/Associate Professor) at Cardiff School of Engineering, Cardiff University, UK. He obtained his **BEng** (Electrical) degree with **First-class Honours** from Sudan University of Science and Technology, Khartoum, Sudan in 1988. He received his **MSc** and **PhD** degrees from **Salford University**, United Kingdom in 1992 and 1996 respectively. Between 1996 and 1999, he was **Assistant Professor** and **Head** of Electrical Engineering Department, Sudan University of Science and Technology, Sudan.

From July 1999 until he joined King Saud University, his work responsibilities at Cardiff University, UK included **attracting external funding** for research, **lecturing**, **supervision of postgraduate students**, **team development and leadership** and **project management**. He has been involved in the editing and review process for several conferences and technical journals. He has organised and chaired many special sessions within international conferences and published numerous conference and journal papers.

Between 2004 and 2009, He was the manager of the EU Network of Excellence on Innovative Production Machines and Systems (I*PROMS) which comprised **30** partner organisations (universities including **Cardiff, Oxford, Cambridge, Warwick, Hannover, Naples**; research centres and multinational companies) from **14** European countries. He was also the Chair of the Organising Committee for the Virtual International Conference series organised by the Network and co-editor of the Conference Proceedings and consequent special issues in relevant international journals.

Dr. Eldukhri is **chartered engineer** (CEng) and **member** of both the Institution of Engineering and Technology (IET) and the Institute of Electrical and Electronics Engineers (IEEE). He is an independent **expert** and **advisor** for the European Commission's Research Framework Programmes. He is also an **expert evaluator** for King Abdul Aziz City for Science and Technology (KACST).

His research interests include: control systems design and applications, advanced robotics, mechatronics, intelligent and sustainable manufacturing.

The following sections provide details of the qualifications, training, work experience and lists of research grants and PhD students.

Personal details:

- Nationality: British

Qualifications:

- 2004, Certificate for Leading and Managing Teams, accredited by the Institute of Leaders and Managers, UK.
- 1996, PhD in Control and Robotics, University of Salford, United Kingdom.
- 1992, MSc in Electronic Control Engineering, University of Salford, UK.
- 1988, BEng with First-Class Honours in Electrical Engineering (Control), Sudan University of Science and Technology, Khartoum, Sudan.

Employment History

- January 2016 – Present, Associate Professor, College of Engineering, King Saud University, Muzahimiyah Campus, Kingdom of Saudi Arabia.

- November 2008 – 4 Sept. 2014, Senior Research Fellow (Grade 8), Cardiff School of Engineering, Cardiff University, UK.
- January 2004 – October 2008, Research Fellow, Manufacturing Engineering Centre, Cardiff University, UK.
- July 1999 - December 2003, Research Associate, Manufacturing Engineering Centre, Cardiff University, UK.
- 1996 - June 1999, **Assistant Professor** and **Head** of the Electrical Engineering Department, Sudan University of Science and Technology, Khartoum, Sudan.
- 1992 - 1996, PhD student, Salford University, United Kingdom.
- 1991 - 1992, MSc Course in Electronic Control, Salford University, United Kingdom.
- 1988 - 1990, Teaching Assistant at the Department of Electrical Engineering, Sudan University of Science and Technology, Khartoum, Sudan.

Professional Affiliation:

- July 2016 – Present, Member of IEEE. <http://www.ieee.org>
- 1999 - Present, Chartered Engineer (CEng) and Member of IET. <http://www.theiet.org>
- 2005 – 2014, Member of UK Automatic Control Council (UKACC). <http://ukacc.group.shef.ac.uk/>
- 2002 – Present, Affiliate member of IFAC. <http://www.ifac-control.org>
- 1991 - 1999, Associate Member of IEE. <http://www.theiet.org>
- 1991 - 1996, Student Member of IEEE. <http://www.ieee.org>

Training

- 4 – 7 April 2016, attended the Active Learning for Enhancing Learning Outcomes Forum organised by the Deanship of Skills Development, King Saud University, Riyadh, Kingdom of Saudi Arabia.
- June 2008, a one-day course on “Supervising Research Students” organised by the Personnel Division, Cardiff University, UK.
- May 2004, a 6-day workshop on “Leading and Managing Teams” organised by the Personnel Division, Cardiff University, UK. The course has been accredited by the Institute of Leadership and Management (ILM), UK.
- September 2002, a one-day course on “Lecturing Skills” organised by the Personnel Division, Cardiff University, UK.
- September 2000, a one-day course on “Lecturing Large Groups” organised by the Personnel Division, Cardiff University, UK.

Key Roles:

- September 2016 – Present, Chair of Committee for Quality and Development, College of Engineering, King Saud University, Muzahimiyah Campus, Kingdom of Saudi Arabia.
- January 2016 – Present, Leader and lecturer of Physics for Engineers II, Electrical Circuits and Machines, Engineering Electromagnetics, Automatic Control and Fundamentals of Power Systems courses at College of Engineering, King Saud University, Muzahimiyah Campus, Kingdom of Saudi Arabia.
- 2013 – 4 Sept. 2014, Leader and lecturer of Mechanical Engineering 2 module on the Clinical Engineering MSc programme, Cardiff University, UK.
- 2012 – 4 Sept. 2014, Leader and lecturer of **Control and Instrumentation** module taught to 2nd year Mechanical and Medical Engineering students, Cardiff University, UK.

- 2004 – 4 Sept. 2014, Principal Investigator of research grants (detailed below) funded by the European Commission.
- October 2011 – Sept. 2014, Line Manager of six senior research staff, School of Engineering, Cardiff University, UK.
- October 2011 – March 2012, Chair of the Working Group for developing a procedure for maintaining smooth operation and efficient joint use of the multi-million manufacturing facilities within the School of Engineering, Cardiff University, UK.
- February – May 2011, Chair of the Working Group for recommending measures to improve the Grant Applications Review Procedure within the School of Engineering, Cardiff University, UK.
- 18 – 21 August 2009, Acting Director of the Manufacturing Engineering Centre, Cardiff University, UK.
- 2004 – 2009, Manager of the €7.5 Million EU-funded Network of Excellence in the area of Innovative Production Machines and Systems (I*PROMS) which comprises 30 organisations from 14 European countries.
- 1999 – 2004, **Leader** and **lecturer** of **Control Engineering and Automatic Control** courses to 2nd and final year students at Cardiff University, UK.
- 1999 - 2003, Project Manager, Manufacturing Engineering Centre, Cardiff University, UK.
- 1996-1999, **lecturing** Electrical Engineering and **Modern Control Systems** courses to undergraduate and postgraduate students at Sudan University of Science and Technology, Sudan.
- 1996 -1999, **Head** of Electrical Engineering Department, Sudan University of Science and Technology, Khartoum, Sudan.

Research grants at Cardiff University, UK

- Anayi F, **Eldukhri E E**
Title: “Design of efficient low cost brushless motors”
Sponsor: ELECTRONIA PRODUCTS LTD
Value: £17,522; Duration: 01/10/2013 - 30/09/2015
- **Eldukhri EE**, Matthews CW
Title: “MINAM 2.0 - Paving the ground for the second generation of highly effective, application orientated micronano manufacturing community in Europe”
Sponsor: European Commission (FP7)
Value: £31,210; Duration: 01/12/2010 - 30/11/2012
- **Eldukhri EE**
Title: “SHIPWELD - Automatic welding process for the shipbuilding industry”
Sponsor: Commission of the European Communities
Value: £205,000; Duration: 01/01/2010 - 31/10/2012
- **Eldukhri EE**, Scholz SG
Title: “EUMINAFAB - Integrating European micro/nano manufacturing research infrastructures”
Sponsor: Commission of European Communities
Value: £656,370; Duration: 01/03/2009 - 31/08/2013
- **Eldukhri EE**, Pham DT, Setchi RM, Dimov SS, Packianather MS, Thomas AJ, Soroka AJ
Title: “Innovative production machines and systems I*PROMS - RCMC008”
Sponsor: Commission of European Communities
Value: £945,102; Duration: 01/10/2004 - 30/09/2009

Postgraduate students at Cardiff University, UK

- Hafizul Azizi Ismail
Degree: PhD
Title: Robotics and Control/Control Systems Engineering
Supervisor(s): **Dr E E Eldukhri**, Dr M S Packianather
- ETUMI Adel Ali Amar
Degree: PhD
Title: Digital relay scheme based on correlation technique for transformer protection
Supervisor(s): Dr F Anayi, Dr A Fahmy, **Dr E E Eldukhri**
- MOHAMED Nasir Yousef
Degree: PhD
Title: Design Optimisation of Permanent Magnet Synchronous Motor for Electric Vehicles Traction using the Bees Algorithm
Supervisor(s): Dr F Anayi, **Dr E E Eldukhri**, Dr A Fahmy
- ISMAEL Adel Ahmed Ali
Degree: PhD
Title: Microprocessor-controlled Brushless and slotless DC Linear Stepping Motor
Supervisor(s): Dr F Anayi, **Dr E E Eldukhri**
- Ali Al-Khafaji
Degree: PhD
Title: Optimal control of a mechatronic system
Supervisor(s): Dr R Grosvenor, **Dr E E Eldukhri**
- KAMIL Haider Galil (**Graduated**)
Degree: PhD
Title: Robotics and Control/Control Systems Engineering
Supervisor(s): **Dr E E Eldukhri**, Dr Y Xue
- NEGM Mohamed Abdel Fattah Mohamed Elshawadfy (**Graduated**)
Degree: MPhil
Title: An improved version of the bees algorithm based on an adaptive learning search framework
Supervisor(s): Prof D T Pham, **Dr E E Eldukhri**
- DARWISH Ahmed Haj (**Graduated**)
Degree: PhD
Title: Enhanced Bees Algorithm with Fuzzy Logic and Kalman Filtering
Supervisor(s): Prof D T Pham, **Dr E E Eldukhri**

Area of Research:

- Advanced Control Systems Design and Applications;
- Mechatronics;
- Design and Control of Advanced Robotics;
- Intelligent and Sustainable Manufacturing Systems.

Work Experience:

- 1 July – 1 August 2017, Visiting Academic at School of Engineering, Cardiff University, UK
- 15 June – 15 July 2016, Visiting Academic at School of Engineering, Cardiff University, UK.
- 2011, Co-editor, Special Issue on Innovative Productions Machines and Systems (I*PROMS) in the Int. J. Computer Aided Engineering and Technology (IJCAET), Vol. 3, No. 3/4.

- 2010, Guest speaker at the Industrial Technologies 2010 Conference, Brussels, Belgium, 7-9 September 2010. <http://www.industrial-technologies2010.eu/>
- 2010 – Present, Expert Evaluator for the EU Research Framework Programmes.
- 2010, Guest speaker at the 4th Conference of the EU 7th Framework Programme, "EU Framework Programmes: From Economic Recovery to Sustainability", Valencia, Spain, 13 – 14 April 2010. <http://www.r2sconference.eu/programmeDay1.php>
- 2009 – Present, Expert Evaluator for King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia. <http://www.kacst.edu.sa>
- 2009, Chair of the Organising Committee for the 3rd Manufacturing in FP7 (EU's 7th Framework Programme) Conference, Cardiff, UK, 14-15 January 2009.
- 2009, Technical programme Chair, 7th IEEE International Conference on Industrial Informatics, INDIN 2009, 24-26 June 2009, Cardiff, UK. <http://www.indin2009.com>
- 2009, Co-editor, Special Issue on Innovative Productions Machines and Systems (I*PROMS) in the Int. J. Computer Aided Engineering and Technology (IJCAET), Vol. 1, No. 2.
- 2009, Co-editor, Special Issue on Innovative Productions Machines and Systems (I*PROMS) in the International Journal of Systems Science, Volume 40 Issue 2.
- 2008, Chair of the Organising Committee for the 2nd Manufacturing in FP7 (EU's 7th Framework Programme) Conference, Cardiff, UK, 16-17 January 2008.
- 2008, Chair and facilitator of the half-day workshop on research skills during I*PROMS Researchers Symposium, MEC, Cardiff University, Cardiff, UK, 1-3 July 2008. <http://www.iproms.org>
- 2008, Co-editor, Special Issue on Innovative Productions Machines and Systems (I*PROMS), Proceedings of the I MECH E Part B Journal of Engineering Manufacture, Volume 222, Number 10, 2008.
- 2008, developed a robotic gymnast ([Robogymnast](#)) that simulates the swinging of human gymnasts on a high bar. The swinging of Robogymnast and balancing it at the upright position is currently under investigation by PhD students.
- 2007, Chair of the Organising Committee for the 1st Manufacturing in FP7 (EU's 7th Framework Programme) Conference, Cardiff, UK, 17-18 January 2007.
- 2007, member of a European delegation to Japan to promote collaborative research links between Europe and Japan, 26-27 March 2007, Tokyo.
- 2007, invited speaker at the Tampere Manufacturing Summit, Tampere, Finland, 6-7 June 2007.
- 2007, invited speaker and chair of the special session: Key Technologies for Innovative Manufacturing at the IMS Event on Strategies for Global Manufacturing, Zurich, Switzerland, 15-16 November 2007.
- 2006, chaired a special session on "Innovative Production Machines and Systems" at the 12th IFAC Symposium on Information Control Problems in Manufacturing, INCOM 2006, Saint-Etienne, France, 17-19 May 2006.
- 2006, invited speaker and chair of a special session on "Innovative Production Machines and Systems" at the 5th International Symposium on Intelligent Manufacturing Systems, IMS 2006, Sakarya, Turkey, 29-31 May 2006.
- 2006, chaired a special session on "Innovative Production Machines and Systems" at the 5th CIRP International Seminar on Intelligent Computation in Manufacturing Engineering, ICME'06, Ischia, Italy, 25-28 July 2006.
- 2005 - Sept. 2014, has been involved in Supervising PhD students researching on intelligent systems, robotics and control at Cardiff University, UK.

- 2005 - Present, chair of the Organising Committee and a technical referee for the International Virtual Conference on Intelligent Production Machines and Systems. <http://conference.iproms.org>
- 2005 – Sept. 2014, Group Member of UK Automatic Control Council (UKACC). <http://ukacc.group.shef.ac.uk/>
- July 2002, Chaired an invited session on “Advanced Robotics” at the 15th IFAC Congress, Barcelona, Spain, 21-26 July, 2002. ISBN: 008044184-X.
- July 2002, Chaired an invited session on “Sensory Robots” at the 15th IFAC Congress, Barcelona, Spain, 21-26 July, 2002. ISBN: 008044184-X.
- 2001 - 2002, Organised a series of seminars covering the range of expertise within the Manufacturing Engineering Centre, Cardiff University, UK.
- September 2001, member of the organising committee and a technical referee to the 17th National Conference on Manufacturing Research, Cardiff University, UK, 4-6 Sept. 2001.
- 1999 – 2004, lecturing Control Engineering and Automatic Control to 2nd and 3rd year students at Cardiff University, UK.
- Since 1999 has been involved in writing research and development (R&D) proposals for attracting external funds.
- Since 1999 has been involved in the review process for several conferences (national and international) and technical journals.
- 1998 – 1999, Supervised an MSc Project: Optimal Controller Design for a Triple Inverted Pendulum Based on Parameters Optimisation.
- 1996-1999, lecturing Electrical Engineering and Modern Control Systems courses to undergraduate and MSc students at Sudan University of Science and Technology, Sudan.
- August 1998, member of a consulting team for "Study of the Possibility of the Bidirectional Operation of Portsudan-Shagara Pipeline (850 Km): Rehabilitation and Introduction of Advanced-tech Control Systems.”

Miscellaneous:

- Regular use of MS Windows, MS Office (Word, Excel, PowerPoint, etc.).
- Programming in C, C++.
- Regular use of Matlab and most of its accompanying toolboxes.
- Internet usage and homepage development.

Contact Details

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