

**Dr. Eldaw E. Eldukhri**  
**Publication List**

**Journal papers:**

- Shaker S.Hasan, Somer M. Nacy, **Eldaw E. Eldukhri**, Haider Galil Kamil, Enass H. Flaieh, 2015, “Position Control of Linkage Underactuated Robotic Hand”, *Journal of Control Theory and Informatics*, Vol. 5, No. 3, pp 1-11. ISSN 2224-5774 (Paper) ISSN 2225-0492 (Online).
- **E E Eldukhri**, H G Kamil, 2015, “Optimisation of swing-up control parameters for a robot gymnast using the Bees Algorithm”, *Journal of Intelligent Manufacturing*, Vol. 26, No. 5, pp 1039-1047. DOI: 10.1007/s10845-013-0848-5. First published online on 22 November 2013.
- H A Ismail, M S Packianather, **E E Eldukhri**, R I Grosvenor, 2015, “Artificial Neural Network Modelling of the Robogymnast”, *J. Engineering Applications of Artificial Intelligence*. Submitted.
- Y Dadam, **E E Eldukhri**, 2012, “A function-based Fuzzy PID (F-FPID) Controller”, *Int. J. of Scientific and Engineering Research*, Issue 3, No. 9, pp 1-7. ISBN/ISSN: 2229-5518.
- **E E Eldukhri**, D T Pham, 2010, “Autonomous swing up control of a three-link robot gymnast”, *Proc. IMechE, Part I: J. Systems and Control Engineering*, Vol. 224, No. 7, pp. 825-833. The most downloaded paper in 2010.
- E Brousseau, **E E Eldukhri**, 2009, "Recent advances on key technologies for innovative manufacturing", *Journal of Intelligent Manufacturing*, DOI 10.1007/s10845-009-0328-0.
- D T Pham, A Haj Darwish, **E E Eldukhri**, 2009, “Optimisation of a fuzzy logic controller using the Bees Algorithm”, *Int. J. Computer Aided Engineering and Technology*, Vol. 1, No. 2, pp 250 – 264.
- D T Pham, M H Awadalla, **E E Eldukhri**, 2007, “Adaptive and cooperative mobile robots”, *Proc. IMechE*, Vol. 221, No. 3, Part I: *J. Systems and Control Engineering*, pp. 279-293.
- D T Pham, N S Gourashi, **E E Eldukhri**, 2007, “Automated Configuration of Gripper Systems for Assembly Tasks”, *Proc. IMechE*, Vol. 221, No. 11, Part B: *Journal of Engineering Manufacture*, pp. 1643 - 1649.
- G A Medrano-Cerda, **E E Eldukhri**, 1997, "Biped robot locomotion in the sagittal plane", *Trans. Inst. Measurement and Control*, volume 19, No. 1, pp 38-49.
- G A Medrano-Cerda, **E E Eldukhri**, M Cetin, 1995, " Balancing and Attitude Control of Double and Triple Inverted Pendulums", *Trans. Inst. Meas. Cont., UK*, vol. 17, No. 3, pp 143-154.

**Journal Editorials:**

- D T Pham, **E E Eldukhri**, A J Soroka, 2011, Guest editorial, 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.
- D T Pham, A J Soroka, **E E Eldukhri**, 2010, Guest Editorial, Special Issue on Production Automation and Control, *Proceedings of the I MECH E Part I: J. Systems and Control Engineering*, Vol. 224, No. 7, pp. i-ii.
- D T Pham, **E E Eldukhri**, A J Soroka, 2009, Guest editorial, Special Issue on Innovative Productions Machines and Systems (I\*PROMS) in the *Int. J. Computer Aided Engineering and Technology (IJCAET)*, Vol. 1, No. 2.
- D T Pham, A J Soroka, **E E Eldukhri**, 2009, Guest editorial, Special Issue on Innovative Productions Machines and Systems (I\*PROMS) in the *International Journal of Systems Science*, Vol. 40 Issue 2.
- D T Pham, A J Soroka, **E E Eldukhri**, 2008, Guest Editorial, *Proceedings of the I MECH E Part B Journal of Engineering Manufacture*, Volume 222, Number 10, 2008 , pp. i-ii.

- D T Pham, B Grabot, **E E Eldukhri**, A J Soroka, V Zlatanov, M S Packianather, R Setchi, P T N Pham, A Thomas, Y Dadam, 2006, Editorial of the Special Issue on “Innovative Production Machines and Systems (I\*PROMS)”, *J. Engineering Applications of Artificial Intelligence*, 19 (2006).
- D T Pham, **E E Eldukhri**, A J Soroka, V Zlatanov, M S Packianather, R Setchi, P T N Pham, A Thomas, Y dadam, 2006, “Introduction to the special section on Innovative Production Machines and Systems (I\*PROMS)”, Editorial, *J. Engineering Applications of Artificial Intelligence*, 19 (2006), pp. 579-581.

#### Conference Proceedings (Co-editor):

- D T Pham, **E E Eldukhri**, A J Soroka, 2011, *Proceedings of the 6th Virtual International Conference on Innovative Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Lulu Publishing (www.lulu.com) (2011) ISBN/ISSN: 978-1-4710-5026-8.
- D T Pham, **E E Eldukhri**, A J Soroka, 2010, *Proceedings of the 5th Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Whittles Publishing (Scotland) (2010). ISBN: 978-184995-007-7.
- D T Pham, **E E Eldukhri**, A J Soroka, 2008, *Proceedings of the 4th Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Whittles Publishing (Scotland) (2008). ISBN 978-1904445-81-4.
- D T Pham, **E E Eldukhri**, A J Soroka, 2007, *Proceedings of the 3rd Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Whittles Publishing (Scotland) (2007). ISBN: 978-1904445-52-4.
- D T Pham, **E E Eldukhri**, A J Soroka, 2006, *Proceedings of the 2nd Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Elsevier (Oxford) (2006). ISBN-10: 0-08-045157-8.
- D T Pham, **E E Eldukhri**, A J Soroka, 2005, *Proceedings of the 1st Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Elsevier (Oxford) (2005), ISBN: 0-080-44730-9.

#### Conference papers:

- Hafizul A Ismail, Michael S Packianather, Roger I Grosvenor, **Eldaw E Eldhukhri**, 2015, “The Application of IWO in LQR Controller Design for the Robot Gymnast”, *Proc. of SAI Intelligent Systems Conference, London, UK, 10-11 November 2015*, pp 274-279.
- Braiwish, N.M. ; Anayi, F.J. ; Fahmy, A.A. ; **Eldukhri, E.E.**, 2015, “Design Optimization Comparison of BLPM Traction Motor using Bees and Genetic Algorithms”, *Proc. of IEEE International Conference on Industrial Technologies (ICIT), Seville, Spain, 17-19 March 2015*, pp 702 – 705.
- H G Kamil, **E E Eldhukhri**, M S Packianather, 2014, “Balancing Control of Robogymnast Based on Discrete-time Linear Quadratic Regulator Technique”, *Proc. of 2nd International Conference on Artificial Intelligence, Modelling and Simulation (AIMS2014), Madrid, Spain, 18-20 November 2014*, pp 137 - 142.
- Braiwish, N.M. ; Anayi, F.J. ; Fahmy, A.A. ; **Eldukhri, E.E.**, 2014, “Design Optimisation of Permanent Magnet Synchronous Motor for Electric Vehicles Traction using the Bees Algorithm”, *Proc. of IEEE International Universities' Power Engineering Conference (UPEC2014), Cluj-Napoca, Romania, 2-5 September 2014*, pp 1 – 5.
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*Conference on Harmonics and Quality of Power (ICHQP), Bucharest, Romania, 25-28 May 2014*, pp 370 – 374.

- Etumi, A.A.A. ; Anayi, F.J. ; Fahmy, A.A. ; **Eldukhri, E.E.**, 2014, "New algorithm based on auto-correlation and cross-correlation scheme to detect the internal fault in single phase transformer", *Proc. of 12th IET International Conference on Developments in Power System Protection (DPSP 2014), Dubrovnik, Croatia, 13-16 May 2014*, pp 1-5.
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- H G Kamil, **E E Eldukhri**, M S Packianather, 2012, "Optimisation of swing-up control parameters for a robot gymnast using the Bees Algorithm", *Proc. of The 8th International Symposium on Intelligent and Manufacturing Systems (IMS), Adrasan, Antalya, Turkey, 27-28 September 2012*, pp 456-466.
- **E E Eldukhri**, D T Pham, A A Fahmy, N B Zlatov, 2010, " Autonomous swing up of a robot gymnast ", *Proceedings of the 5th Virtual International Conference on Innovative Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), to appear in Whittles Publishing (Scotland) (2009), pp 298-304. ISBN: 978-184995-007-7.
- D T Pham, A A Fahmy, **E E Eldukhri**, 2008, "Fuzzy Hysteresis coordinator for Neuro-fuzzy Position Controlled Manipulators", *Proc. Of the 17th IFAC World Congress*, Seoul, Korea, 6-11 July 2008, pp. 9168-9173. ISBN: 978-1-1234-7890-2.
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- D T Pham, A Haj Darwish, **E E Eldukhri**, S Otri, 2007, " Using the Bees Algorithm to tune a fuzzy logic controller for a robot gymnast", *Proceedings of the 3rd Virtual International Conference on Intelligent Production Machines and Systems*, D T Pham, E E Eldukhri and A J Soroka (eds), Whittles Publishing (Scotland) (2007). ISBN: 978-1904445-52-4.
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- D T Pham, M H Awadalla, **E E Eldukhri**, 2006, "Adaptive Knowledge-based Action Selection Architecture for Multiple Mobile Robots", *Proceedings of the 12th IFAC Symposium on Information Control Problems in Manufacturing, INCOM 2006*, Saint-Etienne, France, 17-19 May 2006.
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- D T Pham, N S Gourashi, **E E Eldukhri**, 2006, "Adaptive Robotic Gripper Configuration using Case-based Reasoning", *Proceedings of the 5th CIRP International Seminar on Intelligent Computation in Manufacturing Engineering – CIRP ICME'06*, Ischia, Italy, 25 – 28 July 2006, pp. 577- 582.
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- D T Pham, **E E Eldukhri**, A J Soroka, V Zlatanov, M S Packianather, R Setchi, P T N Pham, A Thomas, Y dadam, 2004, "Innovative Production Machines and Systems (I\*PROMS): A Network of Excellence Funded by the EU Sixth Framework Programme", *Proceedings of the 2<sup>nd</sup> IEEE International Conference on Industrial Informatics INDIN'04*, pp 540-546, Berlin, Germany, 24-26 June, 2004. ISBN: 0-7803-8513-6.
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- D T Pham, **E E Eldukhri**, N B Zlatov, S S Dimov, M S Packianather, D Bratanov, A Toth, G Fazekas, 2002, "Intelligent Robotised Physiotherapy Tested on an 8-DOF Mechatronic Arm", *Proc. of the 15<sup>th</sup> IFAC Congress*, Barcelona, Spain, 21-26 July 2002. ISBN:008044184-X.
- D T Pham, **E E Eldukhri**, S S Dimov, M S Packianather, N B Zlatov, A A Fahmy, Y M Shankir, 2001, "A Knowledge-Based System for Selection of Exercises for Robotised Physiotherapy", *Proceedings of the 8th IEEE International Conference on Mechatronics and Machine Vision Practice*, pp 85-88, Hong Kong, 27-29 August 2001. ISBN: 962-442-191-9.
- D T Pham, N B Zlatov, **E E Eldukhri**, S S Dimov, D Bratanov, T Dobrev, M S Packianather, A A Fahmy, 2001, "Modelling and Control of an 8-dof Mechatronic Limb", *Proceedings of the 8th IEEE International Conference on Mechatronics and Machine Vision Practice*, pp 314-317, Hong Kong, 27-29 August 2001. ISBN: 962-442-191-9.
- D T Pham, Y M Shankir, **E E Eldukhri**, 2001, "Fuzzy Model Reference Adaptive Control Using Reinforcement Learning", *Proceedings of the 8th IEEE International Conference on Mechatronics and Machine Vision Practice*, pp 102-106, Hong Kong, 27-29 August 2001. ISBN: 962-442-191-9.
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**Others:**

- **E E Eldukhri**, 1996, 2nd place Prize for Salford Lady (the Biped Robot), International Exhibition of Robotics, Robotix-96, 15-16 March 1996, Glasgow, UK.
- **E E Eldukhri**, 1996, PhD Thesis: Design and Control of a Biped Walking Robot, Salford University, UK.
- **E E Eldukhri**, 1992, MSc Dissertation: On-line adaptive position control of a DC motor based on robust Controller Design, Salford University, UK.