

Dr. Mahmoud El-Fandi's CV

Brief Biography

Mahmoud El-Fandi was born in 1960. He is a British citizen and is married.

He graduated with a PhD in Electronic & Electrical Engineering in 1998, from the University of Strathclyde in Glasgow, UK,

The Department of Electronic and Electrical Engineering (EEE) at Strathclyde University is the largest of its kind in Scotland. **The Department has been rated top in Scotland, 4th in the UK, by the Times / Sunday Times Good University Guide 2018.**

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Career History

2008- to date: Full time staff member at Electrical and Electronic Engineering Department, Tripoli University, Tripoli-Libya.

2014-to date MSc in Control Engineering post gradual program organizer, at Electrical and Electronic Engineering Department, Tripoli University, Tripoli-Libya.

2002-2008. Head of Electrical and Electronic Engineering Department, Jefara University, Tripoli-Libya.

2004-2005. Dean of Faculty of Engineering, Jefara University, Tripoli-Libya.

1998-2001 Visiting post-doctoral Research Fellow, at Industrial Control Center, Electronic and Electrical Engineering, Strathclyde University, Glasgow, UK.

1984-1989. Computer Engineer at Ministry of Energy , Tripoli-Libya

List of Publications

Books

- 1) **Henderson, I. A McGhee, J., and El-Fandi, M**, (1997), Data Measurement, ISBN 09531409 0 3, Universities Design and Print, University of Strathclyde, UK.
- 2) **ALI. Zayed and Mahmoud El-Fandi**, (2010) A new Implicit Multivariable pole-placement PID Controller., Chapter at “Modelling , Simulation and Identification” Book, Published by Sciyo publisher.

Journal and Conference Papers

1. **M. El-Fandi A. Zayed and A Shallof** (2014) On Line Model Based Fault Detection by using Multifrequency, International Science Index Vol:8 No:4 , pp 1070-1077.
2. **A. Elgarewi M. El-Fandi, M, Almoher**, (2014) Simulating the Effect of the Sampling Time in Different Discrete Transformations for the First Order System Using MATLAB Software. The International Conference on Computing Technology and Information Management, United Arab Emirates April 9-11, 2014.
3. **M. El-Fandi, A. Elgarewi M Almoher**, (2014) Implementation and Simulation of Digital Control Compensators from Continuous Compensators Using MATLAB Software, The Second International Conference on Technological Advances in Electrical, Electronics and Computer Engineering, pp50-58 Malaysia.
4. **N. Aldian, A. Shashl, S. Khalifa M El-Fandi**, (2014) KA QQ-Plot and its Application to Adaptive Recursive System Parameter Estimation, The Second International Conference on Technological Advances in Electrical, Electronics and Computer Engineering, pp 164-171 Malaysia.
5. **A. Zayed, M. El-Fandi**, A New Neural Networks Based Multivariable Nonlinear PID Pole-Zero Placement Control Design, Journal of Engineering Research (University of Tripoli) Issue (19), pp 47-64 March 2014.
6. **A. Zayed, A. Abolaeha, M. El-Fandi and W. Tohomei** (2013) Level Control Using a New Multivariable Nonlinear PID Pole-Zero placement Controller 14th International conference on Sciences and Techniques, Dec. 2013, Sousse, Tunisia.
7. **M. El-Fandi A. Zayed**, (2011) A new Technique of On-line Frequency Identification for MIMO Systems 12th International conference on Sciences and Techniques, Dec. 2011, Sousse, Tunisia.
8. **A. Zayed, M. El-Fandi**, (2009) A Novel Implicit Adaptive pole-placement PID Controller. Modeling and Simulation MS'2009, July 6-8 2009, Banff, Alberta, Canada.
9. **M. El-Fandi A. Zayed and M. Osman**, (2009) On-line Frequency Identification of Chemical Process, First International conference on Chemical and Process Eng., May 5-7 2009, Tripoli University-Tripoli Libya.
10. **Ali Zayed*, M. El-Fandi**, (2009) Control of water bath system by a novel multivariable self-tuning controller, First International conference on Chemical and Process Eng., May 5-7, 2009, Tripoli University-Tripoli Libya.

11. **Ali Zayed*, M. El-Fandi and Amir Hussian,(2008)** An Adaptive Steering System For A Ship Using An Neural Network And Pole Placement Based Self-Tuning Composite Controller, International conference on Modeling and Simulation MS'08, Jordan.
12. **A. Alemam, Ali Zayed, M. Elfandi,(2008)** Speed Control for Different Cylindrical Materials of Centrifugal Casting Machine, International conference on Modeling and Simulation MS'08, Jordan.
13. **M. El-Fandi , A., Zayed, W. Alhas and O. Shatan*, (2007).**, A Virtual Instrument for On line Temperature Measurement. National Conference General Program on Diversified Vocations, Ganzour, Libya, 17-18 December 2007.
14. **A. Zayed*, M. El-Fandi , (2007).**, A novel Implicit Multivariable Adaptive Pole Placement PID Controller, National Conference General Program on Diversified Vocations, Ganzour, Libya, 17-18 December 2007.
15. **M. El-Fandi, (2007),** Review of Modern Control System Engineering Book, by Z. Gajic, D. Petkovski and X. Shen, International Journal of Adaptive Control and Signal Processing, Vol. 17, 675-677, 2007
16. **M. El-Fandi, (2007),** Review of Modern Control System Engineering Book, by Z. Gajic, D. Petkovski and X. Shen, International Journal of Robust and Nonlinear Control, Vol. 21, 449-450, 2007,
17. **Osman, M., El-Fandi, M., A., and Mohamed El-Ghanush, (2007).**, A Virtual Instrument for on Line Data Measurement of Ship Corrosion, Proc. The 3rd Maritime Conferene, Tripoli-Libya 21-22 October 2007.
18. **Ali Zayed, M. El-Fandi M. A. Hamza, and A. Hussain, (2007).**, An Adaptive Steering System For A Ship Using A Pole Placement PID Controller, The 3rd Maritime Conference, Tripoli, Libya, 21-22 October 2007.
19. **M. El-Fandi, A., Zayed, M. and Osman, M., (2007).**, On Recursive Frequency Domain Estimation and its Aerospace Application, Proc. ICASAT 2007, pp 419-427, Tripoli-Libya.
20. **A. Zayed, M. El-Fandi, and Amir, H., (2007).**, New Self-tuning Pole-zero Placement PID Controller with Application to Air Craft, Proc. ICASAT 2007, pp 367-377, Tripoli-Libya.
21. **Osman, M. , El-Fandi, M.M., A., and Mohamed El-Ghanush, (2007).**, A Virtual Instrument for on Line Data Measurement of an Aircraft Physical Parameters, Proc. ICASAT 2007, pp 531-538, Tripoli-Libya.
22. **M. El-Fandi, Henderson, I. A., and McGhee, J., (1998).**, System Identification of a Two Input Two-Output Simulated Distillation Column Using Noninteracting Multisymbol Signal, ESM 98, pp. 176-179, Manchester United Kingdom.
23. **M. El-Fandi, J. M., Henderson, I. A., McGhee, J. and Renwick, A. (1995).**, Designing multifrequency adaptive digital signals using symbolic addition, Proc. IMTC95, IEEE Cat No 95CH35783, pp. 260-264.
24. **El-Fandi, M., McGhee, J. M. and Henderson, I. A. (1996)** Statistical Properties of On-line Recursive Frequency Analysis for Adaptive Control, Proc. of Conference System Identification in Engineering Systems, Swansea March 1996. pp.594-603.in Friswell M.I.&Mottershesd, J.E,1996 "Identification in Engineering Systems"
25. **El-Fandi, M., McGhee, J. M. and Henderson, I. A. (1996)** Robustness of on-line recursive frequency analysis , 1996, Proc. EUROACO Network workshop, Munch, Germany.
26. **McGhee, J., El-Fandi, M. and Henderson, I. A.,** *Multisymbol signals for frequency domain identification'*, Proc. of ICSE 94, Vol.. 2, pp. 809-816, 1994.

27. **McGhee, J., El-Fandi, M. and Henderson, I. A.,** *Recursive data measurement for multifrequency analysis by the correlation method'*, Proc. of ICSE 94, **2**, pp. 817-824, 1994.
28. **McGhee, J., El-Fandi, M. and Henderson, I. A.** *Time varying digital filter for recursive frequency analysis*, Proc. of the 12th International Conference of System Science, Vol. II pp169-174, Wroclaw. Poland 1995.
29. **Henderson, I. A McGhee, J., and El-Fandi, M,** Symbolic addition of square waves for inverse measurement, Trend in industrial measurements and automation, TIMA-96, pp. 337-344. Madras, India, (3-7th January, 1996)
30. **Henderson, I. A McGhee, J., and El-Fandi, M.,** On-line frequency analysis using multisymbol control signals, Proc. of ICSE 96, USA.
31. **McGhee, J., El-Fandi, M. and Henderson, I. A. (1994),** Strathclyde multifrequency ternary sequence test signals, Internal Report, Industrial Control Centre, University of Strathclyde
32. **McGhee, J., El-Fandi, M. and Henderson, I. A. (1994),** Strathclyde multifrequency quaternary sequence test signals, Internal Report, Industrial Control Centre, University of Strathclyde
33. **Henderson, I. A McGhee, J., and El-Fandi, M, (1995),** Data measurement design application and catalogue of Strathclyde compact binary, ternary and Quaternary signals, Internal publication, Industrial Control Centre, University of Strathclyde