

Fadi Eleiwi

CONTACT INFORMATION	KAUST Thuwal, Saudi Arabia 23955	+966-5036-63595 fadi.eleiwi@kaust.edu.sa
RESEARCH INTERESTS	Control systems, Modeling, Observers, Membrane distillation systems.	
EDUCATION	King Abdullah university of science and technology , Thuwal, Saudi Arabia Ph.D., Electrical Engineering, <i>Expected:</i> Spring 2015 <ul style="list-style-type: none">• Thesis Topic: <i>Control and dynamical modeling of membrane distillation system</i>• Advisor: T.M. Laleg-Kirati, Ph.D King Abdullah university of science and technology , Thuwal, Saudi Arabia M.S., Mechanical Engineering, Dec 2011 <ul style="list-style-type: none">• Topic: <i>Semi-Classical Signal analysis, Control systems, Fault detection</i>• Advisor: T.M. Laleg-Kirati, Ph.D University of Jordan , Amman, Jordan B.S., Mechatronics Engineering , Jan 2010	
TRAINING PROGRAMS AND INTERNSHIPS	PLC and Electro-Pneumatic Application 15 hours, FESTO Pneumatic , Amman, Jordan PLC SIEMENS S7-200 18 hours, Engineering training center, Jordanian Engineering Association, Amman, Jordan United Company of Sugar 3 months, Internship on control systems, distillation columns, Jeddah, KSA Rose-Hulman of technology 4 months, Internship and courses work, Terre Haute, IN Ecole Nationale superior de arts au metiers(ENSAM) 2 months, Internship on applying Semi-classical signal analysis on Turbo-machines, Paris, France Ecole Nationale superior de arts au metiers(ENSAM) 2 months, Internship on fault detection and isolation of a surge in Turbo-machines with Semi-classical signal analysis, Paris, France	Dec 2007 Apr 2009 July 2009 Feb 2010 June 2011 June 2012
RESEARCH PROJECTS	University of Jordan <ul style="list-style-type: none">• Linear variable differential transformer (LVDT), Senior project. ENSAM Paris-Tech <ul style="list-style-type: none">• Apply Semi-classical signal analysis on Turbo-machines.• Fault detection and isolation of a surge happening in Turbo-machine using Semi-classical signal analysis. KAUST <ul style="list-style-type: none">• PolyMUMPs model for Bi-stable mechanism for MEMS.• Building a model and a prototype for Nickel Silicide as structural material for MEMS.• Modeling and optimization for Membrane distillation water desalination model.• Observer design of membrane distillation system.	2005-2010 2011-2012 2010-present

PUBLICATIONS

1. **Eleiwi, F.**; Laleg-Kirati, T. ; Khelladi, S. ; Bakir, F. (2011), 'A Semi-Classical Signal Analysis Method for the Analysis of Turbomachinery Flow Unsteadiness', World Academy of Science, Engineering and Technology, International Science Index 59, 5(11), 143 - 147.
2. **Eleiwi, Fadi**; Laleg Kirati, Taous Meriem, "Fault detection of induction machine using semi-classical signal analysis method," Control and Automation 2013: Uniting Problems and Solutions, IET Conference on , vol., no., pp.1,6, 4-5 June 2013,doi: 10.1049/cp.2013.0024.
3. Lutfi Al-Sharif, Mohammad Kilani, Sinan Taifour, Abdullah Jamal Issa, Eyas Al-Qaisi, **Fadi Awni Eleiwi** and Omar Nabil Kamal (2011). Linear Variable Differential Transformer Design and Verification Using MATLAB and Finite Element Analysis, MATLAB for Engineers - Applications in Control, Electrical Engineering, IT and Robotics, Dr. Karel Perutka (Ed.), ISBN: 978-953-307-914-1, InTech, DOI: 10.5772/19601.

SUBMITTED PUBLICATIONS

1. **F. Eleiwi**, T.M. Laleg-Kirati, NDynamic modeling and optimization in membrane distillation system, 2014. submitted to *the 19th World Congress of the International Federation of Automatic Control, Cape Town South Africa.*
2. S. Khelladi, M. Deligant, T.M. Laleg-Kirati, **F. Eleiwi**, F. Ravelet and F. Bakir, New Parameters for the Analysis of Turbomachinery Features by a Semi-Classical Signal Analysis Method, submitted.

WORKSHOPS AND STUDY GROUPS

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| OCCAM study group | April 2013 |
| Bulk processing of solid metal foam, Oxford, UK. | |
| 91th European study group with industry | April 2013 |
| Bristol, UK. | |

TEACHING EXPERIENCE

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| <ul style="list-style-type: none"> ● AMCS 206 - Applied Numerical methods | Fall 2013–14 |
| Instructor: T.M. Laleg-Kirati, Ph.D
Computer, Electrical and Mathematical Sciences and Engineering, KAUST | |
| <ul style="list-style-type: none"> ● AMCS 202 - Applied Mathematics | Summer 2013 |
| Instructor: T.M. Laleg-Kirati, Ph.D
Computer, Electrical and Mathematical Sciences and Engineering, KAUST | |
| <ul style="list-style-type: none"> ● AMCS 202 - Applied Mathematics | Fall 2011–12 |
| Instructor: Sahraoui Chaieb, Ph.D
Mechanical Engineering, KAUST | |

REFERENCES

Upon request