

Thamer Ali Albahkali

Objective

Resume

Education

2005-2009 Michigan State University East Lansing, MI

PhD/Mechanical Engineering

- GPA 3.83/4.0

2003-2004 University of Michigan Ann Arbor, MI

Master's of Science /Mechanical Engineering

- GPA 3.92/4.0

1995-2000 King Saud University Riyadh, Saudi Arabia

B.Sc. /Mechanical Engineering

- GPA 4.63/5.0, "Excellent" with a second degree of honor

Conducted Projects

- "An Impulsive-Momentum Approach to Control of Underactuated Mechanical Systems," PhD Thesis.
- Small project regarding an anthropomorphic arm robot with two revolute wrist joints. The project involves calculating inverse kinematics, developing the dynamic model of the manipulator and applying a control system to calculate joints torques.
- A senior project about developing 3D-Simulation Software for MA3000 Tequipment Robot Kinematics. The software was developed to improve the accuracy of the robot available in the laboratory.
- A study of the development of two-stroke engine and its future in automation and auto mobiles.
- Three environmental researches about: Drain Water, Air Pollution and Noise Pollution.
- Designing an automated tea maker machine.
- A study of management process approach of the Abdul-Lateef Jameel Co. –After selling customer services and spare parts division-, Saudi Arabia.

Training

11/2013 FESTO Riyadh, Saudi Arabia

Short course on process control:

This course involve training on level, temperature, pressure and flow control of water using a PLC.

11/2012 FESTO Riyadh, Saudi Arabia

Short course on Hydraulic, Pnumatic Systems and PLCs:

This course involve training on basic information on Hydraulic and Pneumatic systems and how to use PLCs to control these systems.

6-9/1998 Abdul-Lateef Jameel Co. Jeddah, Saudi Arabia

Three months training involving:

- Theoretical study of the company management, cars functioning
- Monitoring consultant engineers
- Monitoring the control room
- Monitoring mechanics in the workshop

7-8/1995 Industrial and Trading Room Riyadh, Saudi Arabia

Attended three training courses:

- Skills of Assembling Simple Electronic Circuits
- Repairing Common Faults in TV's and VCR's
- How to Repair Radios and Tape Recorders

**Professional
experience**

2009-Now King Saud University Riyadh, Saudi Arabia

Assistant Professor/Mechanical Engineering Department

2001-2002 King Saud University Riyadh, Saudi Arabia

Teacher Assistant/Mechanical Engineering Department

- The teaching covered a tutorial sessions of Solid Mechanics, Dynamics, Control, Vibration, Machine Design and Engineering Drawing

2000-2001 Riyadh Water Works Riyadh, Saudi Arabia

Field Engineer

- The job was about the inspection of mechanical parts such as pumps and pipelines

Taught Courses

- Dynamics
- System Dynamics
- Automatic Control Systems
- Robotics

Published Papers

- Thamer Ali Albahkali, " An Impulse-Momentum Approach to Swing-Up Control of Double Inverted Pendulum on a Cart," *Proceedings of 2011 World Academy of Science, Engineering and Technology, WASET*, p.p. 574-579, July 2011, Netherlands.
- Thamer Albahkali, Ranjan Mukherjee and Tuhin Das, "Swing-Up Control of the Pendubot: An Impulse-Momentum Approach," *IEEE transactions on robotics*, vol.25, pp. 975-982, 2009.
- Thamer Albahkali, Ranjan Mukherjee and Tuhin Das, "An Impulse-Momentum Approach to Swing-Up Control of the Pendubot," *Proceedings of 2008 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS*, pp.3750-3755, September 2008, Nice, France.
- Thamer Albahkali, Ranjan Mukherjee and Tuhin Das, "Swing-Up control of the Pendubot Through Energy Management of the Underactuated Link," *Proceedings of 2007 ASME International Mechanical Engineering Congress and Exposition*, November 2007, Seattle, Washington.

Awards received

- Prince Bander Bin Sultan awards for excellent achievement, 2005
- College of Engineering Dean's Honor List, King Saud University, Riyadh, Saudi Arabia, for the years of 1998,1999 and 2000

Computer Skills

Fortran, Matlab and Simulink, MathCad, C++ Language, Microsoft Office

Languages

English and Arabic

Hobbies and interests

Designing Mechanical parts, Robotics, Drawing, Cars and Sports