# DR. BAJODAH, Abdulrahman H.

Professor, Aeronautical Engineering Dept., King Abdulaziz University

### **Education**

Degree	Field of Study	Institution	Year
PhD	Aerospace Engineering	Georgia Institute of Technology	2003
MS	Aerospace Engineering	Georgia Institute of Technology	1997
BS	Aeronautical Engineering	King Abdulaziz University	1992

# **Academic Experience**

From	То	Institution	Rank	Title (Chair,	Full or
				Coordinator, etc.)	Part Time
2004	2009	King Abdulaziz Univ.	Assist. Prof.		Full Time
2009	2013	King Abdulaziz Univ.	Assoc. Prof.		Full Time
2013	Date	King Abdulaziz Univ.	Professor		Full Time

# **Non Academic Industrial Experience** (including Consultations)

From	То	Company/Entity	Title	Position Description	Full or
				(Brief)	Part Time
2005	2006	Saudi Arabian Airlines		Coordinator of Scientific Collaboration program with KAU	Part Time

# **Funded Research Projects and Patents from the Past Five Years**

- 1. Global Stabilizability Assessment of Rigid Body Attitude Dynamics. Sponsored by King Abdulaziz University, 2009-2010.
- 2. UAV Adaptive Fault Tolerance Control and State Estimation, Autonomous Systems Research Group, Sponsored by King Abdulaziz University, 2012-2013.

# **Certifications and Professional Registrations**

Registered Professional Engineer in Saudi Arabia.

### **Current Membership in Professional Societies and Organizations**

	Society/organization	Rank	Member Since
1.	Saudi Society of Aerospace Sciences (SSAS)	member	2003
2.	International Federation of Automatic Control (IFAC)	member	2007
3.	Aerospace technical committee, IEEE Control Systems	member	2011
	Society		
4.	American Institute of Aeronautics and Astronautics	Senior member	1988
	(AIAA)		
5.	European Embedded Control Institute (EECI)	member	2010

#### **Honors and Awards**

- 1. Special Study in Aerospace Engineering, Post-doctoral summer research award, granted by the British Aerospace Inc., and sponsored by the British Council, Summer 2006, 2008, 2009, 2010, 2011.
- 3. Visiting Scholar, School of Mechanical Engineering, Georgia Institute of Technology.

January-February 2008.

### **Institutional and Professional Services** (administration, committees, units, etc.)

1. Graduate program committee, the aeronautical engineering department, KAU.

### **Principal Publications/Presentations from the Past Five Years**

- 1. <u>Bajodah, Abdulrahman H.</u>, "Servo-constraint Generalized Inverse Dynamics for Robot Manipulator Control," International Journal of Robotics and Automation, vol.25, no.1, 2010, pp.38-47.
- 2. <u>Bajodah, Abdulrahman H.</u>, "Servo-constraint Generalized Inverse Dynamics for Robot Manipulator Control," International Journal of Robotics and Automation, vol.25, no.1, 2010, pp.38-47.
- 3. <u>Bajodah, Abdulrahman H.</u>, "Asymptotic Generalized Inversion Attitude Control," IET Control Theory & Applications, vol.4, no.5, 2010, pp.827-840.
- 4. <u>Bajodah, Abdulrahman H.</u>, "Inertia-Independent Generalized Dynamic Inversion Feedback Control of Spacecraft Attitude maneuvers," Acta Astronautica, vol.68, no.6-7, 2011, pp.1742-1751.
- 5. Hamiduddin, Ismail, and <u>Bajodah, Abdulrahman H.</u>, "Nonlinear Generalised Dynamic Inversion for Aircraft Manoeuvring Control," International Journal of Control, vol.85, no.4, 2012, pp.437-450.
- 6. Rahideh, A., <u>Bajodah, Abdulrahman H.</u>, and Shaheed, M. H., "Real Time Adaptive Nonlinear Model Inversion Control of a Twin Rotor MIMO System Using Neural Networks," Engineering Applications of Artificial Intelligence, vol.25, no.6, 2012, pp.1289-1297.
- 7. <u>Bajodah, Abdulrahman H.</u>, Hamayun, Mirza Tariq, Bharani Chandra, Kumar Pakki, Ahmed, Rihan, and Gu, Da-Wei, "Fault Tolerant Control of Aircraft Actuating Surfaces using Generalized DI and Integral SM Control", Journal of Intelligent and Robotic Systems, vol.69, no.1-4, 2013, pp.181-188.
- 8. <u>Bajodah, Abdulrahman H.</u>, "Asymptotic Robot Manipulator Generalized Inverse Dynamics," Journal of Nonlinear Dynamics and Systems Theory, vol.13, no.1, 2013, pp.25-46.

### **Recent Professional Development Activities** (Workshops, training, etc.)

- 1. IFAC Workshop: 50 Years of Nonlinear Control and Optimization, The Royal Society London UK, September 30 October 01, 2010.
- 2. Adaptive Networks & Bio-Inspired Cognition, Atlanta, Georgia, USA, 14 Dec., 2010.
- 3. Guidance, Navigation and Control Applications in the Aerospace Industry Current Problems and Modern Solutions A Workshop Sponsored by the IEEE Technical Committee on Aerospace Controls, Maui, Hawaii, USA, 14 Dec., 2012.
- 4. "Recent Changes in EAC of ABET Accreditation Requirements," ASU Workshop, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, Jan. 2014
- 5. E-Learning and Distant Learning, KAU Centre for Teaching and Learning Development, Dec. 2013
- 6. Building Students' Moral Values, KAU Centre for Teaching and Learning Development, Dec. 2013