Table of Contents

Table of Contents ................................................................. 1
Books ...................................................................................... 2
Proceedings and Reprint Volumes .......................................... 3
Book Chapters ...................................................................... 3
Journal Special Issues ......................................................... 6
Journal Papers ...................................................................... 7
Intelligent Control and Adaptive Critics .............................. 7
Cooperative Distributed Control .......................................... 10
Control of Microgrid and Electric Power Systems ............... 11
Discrete Event Supervisory Control & Decision Systems .... 12
Control of Industrial and Computer Processes .................. 13
Aircraft and Helicopter Control ......................................... 14
Sensor Networks & Real-Time/Internet-Based Control ....... 15
Distributed Signal Processing & Control ......................... 16
MEMS Microelectromechanical Systems ......................... 16
System Theory ................................................................. 16
Adaptive and Robust Control ............................................ 17
Robotics and Human-Robot Interaction ............................ 17
Neural Networks for Control ............................................. 18
Fuzzy Logic Control ......................................................... 20
Biosystems ................................................................. 20
Mobile Robots .............................................................. 21
Stewart Platform Manipulator ......................................... 21
Flexible and Vibratory Systems Control ......................... 21
Construction Automation ............................................... 21
2-Dimensional Systems ................................................. 22
Singular/Descriptor Systems .............................................. 22
Magazine and Trade Journal Articles .............................. 24
Conference Papers Published in Proceedings .................... 24
Intelligent Control and Adaptive Critics .......................... 24
Cooperative Distributed Control ...................................... 26
Control of Microgrid and Electric Power Systems .......... 28
Discrete Event Control & Decision Systems ................. 28
Control of Industrial and Computer Processes ............... 31
Aircraft and Helicopter Control ...................................... 32
Sensor Networks & Real-Time/Internet-Based Control .... 32
Distributed Signal Processing & Control ......................... 34
MEMS Microelectromechanical Systems ......................... 34
System Theory .............................................................. 34
Adaptive and Robust Control .......................................... 35
Robotics and Human-Robot Interaction .......................... 36
Neural Networks for Control ........................................... 36
Fuzzy Logic Control ....................................................... 40
Mobile Robots .............................................................. 41
Stewart Platform Manipulator ......................................... 42
Flexible and Vibratory Systems Control ......................... 42
Construction Automation ............................................... 43
2-Dimensional Systems ................................................. 43
Singular/Descriptor Systems ............................................ 43
Unpublished Reports ......................................................... 45
Technical Reports ........................................................... 45
Reviews and Editorials ....................................................... 45
Books


Note: Items 1 and 2 resulted in the receipt of the American Society of Engineering Education (ASEE) Frederick Emmons Terman Award in 1989.


**Proceedings and Reprint Volumes**


**Book Chapters**


This chapter reached 9000 downloads in October 2013.


This chapter reached 3000 downloads in May 2014.


This chapter reached 3000 downloads in March 2014.


**Journal Special Issues**


Guest Editor, Int. Journal of Control, Special Issue on “Neural Networks Feedback Control with Guaranteed Stability,” vol. 70, no. 3, 1998.


Journal Papers

Intelligent Control and Adaptive Critics


This paper was cited by www.BioMedLib.com as the top article in the topic domain in March 2011.


This paper was cited by www.BioMedLib.com as the top article in the topic domain in May-July 2012.

This paper was cited in April 2012 by www.BioMedLib.com as the top article in the topic domain since its publication.

Cited by Biomedupdater.com in July 2014 as the 8th top article in the topic research domain since its publication.


This paper was cited by www.BioMedLib.com as the top 15th article in the topic domain in May 2012.


This paper was cited by Science Direct as among the Top 25 most cited Automatic papers during April-June 2010.
Selected for inclusion in the ‘ACC Virtual Special Issue of Annual Reviews in Control’ as the first-listed among the six most influential papers of Automatica published between 2010-2013.


This paper was listed by Science Direct as the 17th most read Automatica article of July-Sept 2011.


This paper was cited by www.BioMedLib.com as the top article in the topic domain in Oct. 2012.


This paper was listed by IEEEExplore as the second most accessed CS Mag. article in March 2013.


This paper was listed by BioMedLib as the 8th most read article in ISA Trans. of October 2013.


**Cooperative Distributed Control**


This paper was listed by Science Direct as the 2nd most read Automatica article of July-Sept 2011.


This most downloaded Automatica article Jun-Aug 2012.


Second most downloaded Automatica article Jun-Aug 2012.


Listed by Science Direct as the 5th most read Automatica article of July-Sept 2012.


Control of Microgrid and Electric Power Systems


This was the 3rd most downloaded article in this journal in August 2013


Discrete Event Supervisory Control & Decision Systems


Control of Industrial and Computer Processes


Aircraft and Helicopter Control


Sensor Networks & Real-Time/Internet-Based Control
**Distributed Signal Processing & Control**


**MEMS Microelectromechanical Systems**


*This paper won the Emerald Highly Commended Award. Dr. Lewis assisted with the editing of the paper.*


**System Theory**


**Adaptive and Robust Control**


**Robotics and Human-Robot Interaction**

*Note: For additional papers on robot control see ‘Mobile Robots’, ‘Neural Networks’, ‘Fuzzy Logic’, ‘Stewart Platform’, and ‘Flexible and Vibratory Systems’.*


**Neural Networks for Control**

*Note: For additional papers on neural network control see 'Intelligent Control and Adaptive Critics' and 'Mobile Robots'*


**Fuzzy Logic Control**


**Biosystems**

Mobile Robots


Stewart Platform Manipulator


Flexible and Vibratory Systems Control


Construction Automation

2-Dimensional Systems


Singular/Descriptor Systems


Magazine and Trade Journal Articles


Conference Papers Published in Proceedings

Note: Papers for conferences involving the IEEE Control Systems Society are fully refereed and appear in Proceedings. All of the listed papers below are peer-reviewed and published.

Intelligent Control and Adaptive Critics


This is the most cited paper in IJCNN since 2009 according to http://arnetminer.org/conference/ijcnn.


This paper won the IJCNN 2010 Best Paper Award.


Cooperative Distributed Control


Won the Best Paper Award for Autonomous/Unmanned Vehicles, Army Science Conf. 2010.


Control of Microgrid and Electric Power Systems


Discrete Event Control & Decision Systems

Note: Additional papers on discrete event control are listed under ‘Cooperative Distributed Control’


**Control of Industrial and Computer Processes**


Won the Best Application Paper Award at Asian Control Conference, Taiwan, May 2011.


**Aircraft and Helicopter Control**


**Sensor Networks & Real-Time/Internet-Based Control**


This paper won the IEEE RAM Conf. Best Paper Award 2006.


**Distributed Signal Processing & Control**


**MEMS Microelectromechanical Systems**


**System Theory**


Adaptive and Robust Control


Robotics and Human-Robot Interaction

Note: For additional papers on robot control see ‘Mobile Robots’, ‘Neural Networks’, ‘Fuzzy Logic’, ‘Stewart Platform’, and ‘Flexible and Vibratory Systems’.


Neural Networks for Control


Fuzzy Logic Control


Mobile Robots


Stewart Platform Manipulator


Flexible and Vibratory Systems Control


[344] F.L. Lewis and M. Vandegrift, “Flexible robot arm control by a feedback linearization/singular perturbation


systems,” Active and Passive Control of Mechanical Vibration, PVP-Vol. 289, pp. 11-18, ASME Winter

without measuring the velocity of the deflection,” Proc. IEEE Conf. Decision and Control, pp. 1811-1816,

42


Construction Automation

2-Dimensional Systems


Singular/Descriptor Systems


Unpublished Reports


This paper won two awards: (1) Fourth Place Award, 1992 IEEE Region 5 Meeting, (2) Second Place Award, IEEE Industry Applications Society 1992 National Student Prize Paper Competition.


Technical Reports


Reviews and Editorials


