V. Extension and Service
(Last updated 9/12/2007)

A. Educational Materials Produced.

Textbooks:

Education Related Papers:

Note: (+) means abstract based conference paper/presentation. + means student author.

B. Presentations

Workshops and Short Courses Offered/Organized:
2. 06/13/2003. “Parsimonious ILC and RC: Seagate Experience” (Tutorial Lecture) at the first Iterative Learning Control International Summer School at Utah State University (See other presentations and photos here) (half day)
4. 4/19/05. Fractional Order Calculus Day at Utah State University (presentation slides) (A full day)
11. FOC Day @ USU, April 19, 2005. “Fractional Order Calculus Day at Utah State University”. Full day workshop. http://mechatronics.ece.usu.edu/foc/event/FOC_Day@USU/

Invited Seminar/Talks:
- April 2000. "Frictional force on the high precision servo control". First Seagate Singapore TEC Symposium, Singapore;
- 06/13/2003. Parsimonious ILC and RC: Seagate Experience (Tutorial Lecture) at the first Iterative Learning Control International Summer School at Utah State University (See other presentations and photos here)
- 06/17/2003. Some Servo Patents for Low Cost High TPI Hard Disk Drives abstract/bio. The Colorado Center for Information Storage, the University of Colorado, Boulder
- 03/05/2003. USU ECE6800 Seminar by Dr YangQuan Chen on FOC. Fractional order calculus, fractional order filter and fractional order control: an overview and some recent developments. Check here for PDF slides.
- 03/28/2003. Une proposition pour la synthèse de correcteurs PI d'ordre non entier. YangQuan Chen (Utah State University, USA), Concepción A. Monje, Blas M. Vinagre (Universidad de Extremadura, Espagne). (Slides PDF) Action thématique "Les systèmes à dérivées non entières" - LAP - ENSEIRB, Bordeaux.
- 10/17/2003. Réalisation synthétique de l'opérateur de dérivation non entière. C. Tricaud (ENSEIRB – Université Bordeaux 1) and YangQuan Chen (Utah State University, USA). (Slides PDF) Action thématique "Les systèmes à dérivées non entières" - LAP - ENSEIRB, Bordeaux.
- May 19, 2004. The Innovation Showcase, The Edison Conference, Univ. of Utah, SLC. (Program.pdf, see Booth #44)
- 08/17/2004. “Mobile actuator and sensor networks for diffusion boundary determination and zone control”, Invited talk (75 minutes) at the Institute of Intelligent Machines of Chinese Academy of Sciences (IIM of CAS) in Hefei, the capital city of Anhui Province, China.
- 08/19/2004. “Iterative Learning Control: from Academia to Industry”. Invited Seminar (75 minutes) at the Department of Automatic Control, Southeast University, Nanjing, the capital city of Jiangsu Province, China.
- 08/20/2004. “Fractional order control” (75 minutes) Invited Seminar at Institute of Robotics and Artificial Intelligence, Northeastern University, Shenyang, capital city of Liaoning Province, China.
- 2/25/05. ECE Dept. IAC meeting, presentation of "CSOIS: Past, Present, and Future cum MAS-net". Lab tour/Demo.


June 16, 2006. “HDD servo - All smart ideas tried?!”, Seagate SHK Design Center. Minneapolis, MN. (During ACC2006)


C. Campus Service

- Acting Director, CSOIS Center for Self-Organizing and Intelligent Systems (http://www.csois.usu.edu) (since June 2004)
- Chair, Electrical Engineering Faculty Search Committee, ECE Dept. of USU (2007),
- Member, Dept. Head Search Committee, ECE Dept. of USU (2007).
- Member, Executive Committee, ECE Dept. of USU (2007).
- Member of the Electrical Engineering Faculty Search Committee, ECE Dept. of USU (2004, 2006),
- Member of the Graduate Committee, ECE Dept. of USU (2002-present)
- Judge, USU Graduate Symposium, USU Graduate Student Senate, March 4, 2004; April 15, 2005.
- USU CSSA (Chinese Students and Scholars Association) Faculty Advisory Committee (2003).
- Faculty Mentor (2001-2002) for Vector Floor Theme Hall Program, Jones Hall, Housing and Food Service and College of Engineering.
- Faculty Mentor (2002-2003) for Theme Housing Program, Reeder Hall, Housing and Food Service and College of Engineering.
- Appreciation Letter from the late USU President Kermit L. Hall. “Student Move-in Days”. Volunteer helper, for two days, 2003.

D. Professional Service

- Associate Editor, ISA Review Board for American Control Conference of AACC (2004-)
- Associate Editor, IEEE Control Systems Society Conference Editorial Board (2002-)
- Associate Editor, Joint IEEE CDC05 and European Control Conference 2005 . 2008.
- Member, International Program Committee. 3rd IFAC Int. Workshop on Fractional Derivative and Applications (FDA08), Turkey.
- Technical Program Co-Chair, 2008 Int. Conf. on Decision and Control in China (CDC08-China), Yantai, China.
- Tutorial/Workshop Co-Chair, 2008 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM08), Xi’an, China.
- Tutorial/Workshop Co-Chair, 2008 IEEE International Conference on Mechatronics and Automation (ICMA08), Japan.
Member, International Program Committee. The 7th World congress on Intelligent Control and Automation (WCICA'08), Chongqing China during June 25-27, 2008.


Member, Program Committee. 2008 IEEE International Conference on Networking, Sensing and Control (IEEE ICNSC'08), Sanya, China.

Member, Program Committee. IEEE ISIC (International Symposium of Intelligent Control) track of the IEEE MSC2008, San Antonio, TX, USA, October 2008.


2007:


Program Chair, ASME/IEEE Int. Conf. on Mechatronics, Embedded Systems and Applications (MESA07), 9/4-7, 2006, Las Vegas.


Member, Program Committee. 2007 IEEE International Conference on Automation and Logistics (ICAL 2007), Jinan, Shandong, China, August 18-21, 2007.


Member of the International Program Committee (IPC) for the 20th IEEE International Symposium on Computer-Based Medical Systems, Maribor, Slovenia, June 20-22, 2007.

Member, International Program Committee. CINCO 2007. International Conference on Informatics in Control, Automation & Robotics


Track Chair of Mechatronics. 2007 IEEE International Conference on Industrial Electronics and Applications, Harbin, China.

Special Invited Talk/Discussion. 2007 IEEE International Conference on Industrial Electronics and Applications, Harbin, China

IPC Co-Chair. 2007 IEEE International Conference on Industrial Electronics and Applications (IEEE ICMA07), Harbin, China.

IPC member. 2007 IEEE Int. Symposium on Approximate Dynamic Programming and Reinforcement Learning (ADPRL07), Hawaii, USA.

IPC member. IEEE SMCia/07 workshop in Passau, Germany, on August 1 - 3, 2007.

IPC member. The International Conference on Advanced Engineering Computing and Applications in Sciences (ADVCOMP 2007). November 4-9, 2007 - Papete, French Polynesia (Tahiti)

IPC member. IASTED International Conference on Computational Intelligence (CI 2007), Jul 02, 2007 to Jul 04, 2007, Banff, Canada.


2006:

IPC member, The International Conference on Wireless Algorithms, Systems and Applications (WASA06), Xi’an China;

Award Committee Chair, IEEE Mountain Workshop on Adaptive & Learning Systems (SMC/ALS06), Utah State Univer., Logan, 7/24-26/2006

Member, Program Committee, 2006 IEEE Symposium on Computer-Based Medical Systems, Marriott Salt Lake City – City Center, Salt Lake City, Utah, USA, June 22-23, 2006. http://CBMS2006.ece.byu.edu

Member, Program Committee, IEEE Int. Conf. On Networking, Sensing & Control (ICNSC06) Ft. Lauderdale, FL, U.S.A. April 23-25, 2006

Tutorial and Workshops co-Chair. IEEE Int. Conf. on Information Acquisition (ICIA06), August 20 - 23, 2006, Shandong University, China.

Program Co-Chair, The 2006 IEEE Int. Conf. on Mechatronics & Automation, June 25-28, 2006 (ICMA06) Luoyang, Henan Province, China.
- Member, IPC, the 2nd IFAC Workshop on Fractional Differentiation and its Applications, 19-21 July, 2006, Porto, Portugal.
- **Plenary Speaker**, the 2nd IFAC Workshop on Fractional Differentiation and its Applications, 19-21 July, 2006, Porto, Portugal.
- Member, IPC, 9th Int. Conf. on Control, Automation, Robotics and Vision, ICARCV’06, Singapore, 5-8 Dec. 2006.

2005:
- **Organizer**, Whole day workshop. “Fractional Calculus Day @ Utah State University”. CSOIS. April 19, 2005.
- Member, IPC. 7-th Computational Intelligence and Natural Computing (CINC05) with 8th Joint Conf. on Information Sciences (JCIS 2005) July 21 - 26, 2005, Salt Lake City, Utah.
- Member, IPC. CSI 2005. 8th Int. Conf. on Computer Science and Informatics with 8th Joint Conf. on Information Sciences (JCIS 2005) July 21 - 26, 2005, Salt Lake City, Utah.
- Member, TPC for Track 8: “Theory, Design and Implementation of Circuits & Systems”. 2005 ICCCAS, Hong Kong, China.
- **Tutorials/Workshops Co-Chair**, IEEE Int. Conf. on Information Acquisition (IEEE ICIA 2005), Hong Kong/Macau, China. July 9 to 10 and the regular conference program at the Chinese University of Hong Kong from July 11 to 13, 2005.
- Member, International Program Committee; Invited Session co-Chair, 2005 IEEE ICMA05, July 29-August 1, Niagara Falls, Ontario, Canada.
- **Co-Chair, Special/Organized Sessions**, 2005 IEEE/RSJ IROS05. August 2-6, 2005, Edmonton, Alberta, Canada.

2004:
- **Reviewer Committee**, IFAC Int. Workshop on Fractional Derivative and Applications (FDA04), July 19-21, 2004, Bordeaux, France.
- Member, Technical Program Committee (TPC). 2004 International Conference on Communications, Circuits and Systems (ICCCAS04), June 28-June 30, 2004, Chengdu, Sichuan, China.
- Member, International Program Committee (IPC), IEEE Int. Conf. Computational Cybernetics 2004 (ICCC04), Austria.

2003:
- Member, International Program Committee (IPC), IEEE CIAC2003, Hong Kong, China; IEEE CIRA2003, Kobe, Japan.
- Session Chair and Session co-Chair. ASME DETC 2003. VIB. Chicago; Session co-Chair. IEEE CDC2003 (Program), Hawaii, USA.
- **Founding Member** of ASME subcommittee “Fractional Dynamics” (2003, Chicago)
- **Co-organizer and Instructor**, Tutorial Workshop on “Fractional order calculus in control and robotics” at IEEE CDC’02, Las Vegas, NE, USA.
- Member, IPC, IEEE CIRA 2001, July 29 - August 1, 2001, Banff, Alberta, Canada

Reviewers for many journals and international conferences.
Session chair/co-chair for many international conferences.

**E. Community Service**

**International Visiting Scholars Hosted at CSOIS (22)**
- France (2): Christophe Tricaud, Theodore Ndaza,
- Slovakia (1): Igor Podlubny
- China (9): Tengyun Zhao; Zhian Wang; Jiping Ni; Shengyuan Xu; Xia Zhao; Wen Chen; Yan Li; Bin Wang; Ying Luo.
- Germany (4): Fernando Buck; Florian Zwetti; Marc Baumann; Daniel Kaplanek.
- Finland (1): Sakari Kettunen
- Spain (2): Ángel Rodriguez Castaño; Concha Monje;
• Poland (1): Dariusz Ucinski;
• Sweden (2): Kenneth Holmstrom; Fredrik Hellman

F. Awards and Honors for Extension and Service

• Appreciation Letter from the late USU President Kermit L. Hall. “Student Move-in Days”. Volunteer helper, for two days, 2003.

G. Other.
N/A.