BIOGRAPHICAL SKETCH

YangQuan Chen

ME/EECS, School of Engineering, 5200 North Lake Road Merced, CA 95348, USA W: <u>http://mechatronics.ucmerced.edu</u> Professor, Mechatronics University of California, Merced (UCM) T: (209)228-4672; F: (209)228-4047 E: <u>ychen53@ucmerced.edu</u>, <u>yqchen@ieee.org</u>;

PROFESSIONAL PREPARATION

Nanyang Technological Univ., Singapore Beijing Institute of Technology, China Univ. of Sci. and Tech. of Beijing, China Ph.D. 1998 Advanced Control & InstrumentationM.S. 1989 Control Theory & ApplicationsB.S. 1985 Industrial Automation

APPOINTMENTS

2017-	Professor (stp 3), University of California, Merced (UCM) (s' Fall17)
2014-2017	Associate Professor (stp 4), University of California, Merced (UCM) (s' Fall14)
2012-2014	Assistant Professor (stp 6), University of California, Merced (UCM) (s' Fall12)
2011	Visiting Professor, University of Pretoria, South Africa (Jan. – May)
2008-2012	Associate Professor and Graduate Coordinator (08-10), ECE Dept. of USU.
2004-2012	Director of Center for Self-Organizing and Intelligent Systems (CSOIS)
2002-2008	Assistant Professor of Electrical Engineering, ECE Dept. of USU.
2000-2002	Research Assistant Professor, ECE Dept. and CSOIS, USU
1999-2000	Staff Engineer, Servo Product Development Group, Seagate Technology
	International, Singapore Science Park Design Center, Singapore.
1998-1999	Professional Officer, Center for Intelligent Control, National Univ. of Singapore.
1996-1998	Research Engineer, ECE Dept. of National University of Singapore, Singapore
1995-1996	Research Scholar. School of EEE, Nanyang Technological University, Singapore.
1994-1995	Associate Professor, Dept. of Electrical Engineering, Xi'an Inst. of Tech., China
1992-1995	Deputy Head, Dept. of Electrical Engineering, Xi'an Inst. of Technology, China
1988-1994	Lecturer, Dept. of Electrical Engineering, Xi'an Institute of Technology, China
1987-1988	Visiting Researcher, Dept. of Automatic Control, Beijing Institute of Tech., China

PUBLICATIONS

(http://scholar.google.com/citations?user=RDEIRbcAAAAJ&hl=en | ISI H-index=44) FIVE publications most related:

- Kecai Cao and YangQuan Chen. "Fractional Order Crowd Dynamics: Cyber-Human System Modeling and Control" (Vol. #1 of the **De Gruyter** Monograph Series "Fractional Calculus in Applied Sciences and Engineering", to appear late 2017) ISBN: 978-3-11-047398-8
- Zhen Song, YangQuan Chen et al. "*Optimal Observation for Cyber-Physical Systems A Fisher Information Matrix Based Approach*". **Springer** 2009. ISBN: 978-1-84882-655-7.
- Christophe Tricaud and YangQuan Chen. "Optimal Mobile Sensing and Actuation Policies in Cyber-Physical Systems" Spring-Verlag, ISBN-13: 978-1447122616, 2011.
- Haiyang Chao+ and YangQuan Chen*. "*Remote Sensing and Actuation Using Unmanned Vehicles*" Wiley-IEEE Press, Aug. 2012 ISBN-13: 978-1118122761

• YangQuan Chen*, Zhongmin Wang+ and Jinsong Liang+. "Optimal Dynamic Actuator Location in Distributed Feedback Control of A Diffusion Process," *International Journal of Sensor Networks*. Volume 2 - Issue 3/4 – 2007, pp. 169 - 178

FIVE other publications:

- Dingyu Xue and YangQuan Chen. "Modeling, Analysis and Design of Control Systems in MATLAB and Simulink", **World Scientific 2014**, 580pp Nov 2014. 978-981-4618-45-8
- Dingyu Xue and YangQuan Chen. "System Simulation Techniques with MATLAB® and Simulink®". 2013. John Wiley & Sons, Ltd. ISBN: 978-1-118-64792-9. (468 pages)
- Dingyu Xue* and YangQuan Chen. "Solving Advanced Applied Mathematical Problems Using Matlab". **Taylor and Francis CRC Press**. 2008. ISBN: 978-1420082500
- Dingyu Xue, YangQuan Chen* and Derek Atherton. "Linear Feedback Control Analysis and Design with Matlab". **SIAM Press**, 2007, ISBN: 978-0-898716-38-2. (348 pages)
- YangQuan Chen and Changyun Wen, *"Iterative Learning Control: Convergence, Robustness and Applications,"* Springer-Verlag, Lecture Notes Series on Control and Information Science, vol. LNCIS-248, 1999, 199 pages, ISBN: 1-85233-190-9.

SYNERGISTIC ACTIVITIES:

- NSF REU (Research Experience for Undergraduates) site program PI/Director (2006-2012). Engaged 45+ undergraduates, about half of them from outside Utah and underrepresented.
- 2nd Place Award, AUVSI Student UAS Competition 2008, Maryland (\$8000 cash prize); 1st Place Award, AUVSI 2009, Maryland (\$14000 cash prize). 1st place again in 2011 (\$13600)
- Chair and Organizer, Int. Symp. On Small UAV Tech. and Applications (SUAVTA) under MESA, 2009-2017; General co-Chair, Int. Conf. UAS, 2017, Program co-Chair 2016.
- Faculty Researcher of The Year, (Robins Award), Utah State University, 2012
- Best Paper Award, IFAC journal Control Engineering Practice (IFAC World Congress 2011)

COLLABORATORS & OTHER AFFILIATIONS:

Collaborators and Co-Editors.

J. Q. Sun, Y. Ma, Gerardo Diaz, J. Viers, UC Merced, USA

S. Song, Siemens Corporate Research, Princeton, USA

X. Xia, University of Pretoria, South Africa

I. Podlubny, Tech. Univ. of Kosice, Slovakia

D. Xue, Northeastern University, China

D. Ucinski, Univ. of Zielona Góra, Poland;

Editorial board members of several journals such as IEEE Trans. Control Systems Tech., IFAC Mechatronics, IFAC Control Eng'g Practice, ISA Transactions, IET CTA.

Graduate Advisors and Postdoctoral Sponsors.

Ph.D Advisor: Professor Changyun Wen, Nanyang Technological University, Singapore; **Postdoctoral Advisor**: Professor Kevin L. Moore, Colorado School of Mines, USA.

Thesis Advisor and Postgraduate-Scholar Sponsor.

Graduated 10 Ph.D. and 14 MSc. students. Now serving as faculty advisor for 40 plus undergraduate researchers, 11 visiting scholars, and 7 PhD students.