CURRICULUM VITAE (Abbreviated)
Jing Pang

EDUCATION

Ph. D. in Electrical Engineering
    Ohio University (2003)

M.S. in Electrical Engineering
    Xi'an Jiaotong University, P. R. China (1996)

B.S. in Electrical Engineering
    Xi'an Jiaotong University, P. R. China (1993)

PROFESSIONAL APPOINTMENTS

Aug. 2016 – Present	California State University, Sacramento Department of Electrical and Electronics Engineering and Computer Engineering Program	**Professor**,
Aug. 2009–Aug. 2016	California State University, Sacramento Department of Electrical and Electronics Engineering and Computer Engineering Program	**Associate Professor**,
Aug. 2003–Aug. 2009	California State University, Sacramento Department of Electrical and Electronics Engineering and Computer Engineering Program	**Assistant Professor**,
2004 - 2005	Source III (Acquired by Synopsys)	**Part-time Engineer Consultant**
Jun. 2001 – Sep. 2001	Sarnoff Company, Princeton, New Jersey	**Internship**
Nov. 1999 – Aug. 2003	Ohio University, Athens, OH	**Research Assistant**
Sep. 1999 – Nov. 1999	Ohio University Athens, OH	**Teaching Assistant**
Aug. 1998 – Sep. 1999	Dayton Wright Lab Dayton, OH	**Research Assistant**
Sep. 1996 – May, 1998	Zhengzhou University, P. R. China	**Assistant Professor**

PUBLICATIONS

A.   BOOK/BOOK CHAPTERS

- Jing Pang,
  Chapter 12. "Remote Hand Motion Detection and Monitoring with Noise Reduction",
  Book Title:
  > IAENG Transactions on Engineering Technologies - Special Edition of the World Congress on Engineering and Computer Science 2011,
  > Series: Lecture Notes in Electrical Engineering, Volume 170, 2013, pp. 151-160,
  > Publisher: Springer, ISBN: 978-94-007-4785-2.
  - Online http://link.springer.com/chapter/10.1007/978-94-007-4786-9_12?no-access=true

- Jing Pang, Shitalben Chauhan and Jay Maheshkumar Bhlodia,
  Chapter Title: "Speech Compression FPGA Design by Using Different Discrete Wavelet Transform Schemes**,**
  Book Title: IAENG Transactions on Electrical and Electronics Engineering Volume I - Special Edition of the World Congress on Engineering and Computer Science 2008, pp. 21 – 29.
  Publisher: IEEE Computer Society, ISBN: 978-0-7695-3555-5.
  - Online: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5233200
  - Online: https://www.computer.org/csdl/proceedings/wcecs/2008/12OmNwpGgL5

B.   JOURNAL PAPERS

- <u>Jing Pang</u>, "Variance Window Based Car License Plate Localization", Journal of Computer and Communications, 2014, 2, pp. 61-69.
    - Online: http://www.scirp.org/journal/PaperDownload.aspx?paperID=47726

- <u>Jing Pang</u>, Jayesh Lanjewar, Prasen Shah, "FPGA Design of Digital Audio Recorder", October - December 2007 issue of i-manager's Journal on Electrical Engineering, 2007, pp. 30 -35.

- <u>Jing Pang</u>, Frank Van Graas, Janusz A. Starzyk, Zhen Zhu, "Fast Direct GPS P-Code Acquisition", GPS Solutions, Vol. 7, No. 3, December 2003, pp. 168-175.
    - Online: http://link.springer.com/article/10.1007%2Fs10291-003-0070-6

- <u>Jing Pang</u>, Janusz A. Starzyk, "Fault Diagnosis in Mixed-Signal Low Testability System", An International Journal of Analog Integrated Circuits and Signal Processing, Vol. 28, No.2, August 2001, pp. 161-172.
    - Online: https://link.springer.com/article/10.1023/A:1011289932167

- Janusz A. Starzyk, <u>Jing Pang</u>, Stefano Manetti, Maria Cristina Piccirilli, and Giulio Fedi,, "Finding Ambiguity Groups in Low Testability Analog Circuits", IEEE Transactions on Circuits and Systems, Part I, Vol. 47, No. 8, August 2000, pp. 1125-1137.
    - Online: https://ieeexplore.ieee.org/document/873868

C.   CONFERENCE PAPERS

- <u>Jing Pang</u>, "Spectrum Energy Based Voice Activity Detection," 2017 IEEE 7th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, January 2017, pp. 1 – 5.
  Best Paper Award
    - Online: https://ieeexplore-ieee-org.proxy.lib.csus.edu/stamp/stamp.jsp?tp=&arnumber=7868454

- <u>Jing Pang</u>, "Improved Image Denoising Based on Haar Wavelet Transform", 2017 IEEE SmartWorld, Ubiquitous Intelligence & Computing, Advanced & Trusted Computed, Scalable Computing & Communications, Cloud & Big Data Computing, Internet of People and Smart City Innovation (SmartWorld/SCALCOM/UIC/ATC/CBDCom/IOP/SCI) , San Francisco Bay Area, August 2017, pp. 1 – 6.
    - Online: https://ieeexplore-ieee-org.proxy.lib.csus.edu/stamp/stamp.jsp?tp=&arnumber=8397456

- <u>Jing Pang</u>, "Intelligent Traffic Light Controller Design Using FPGA", 2016 IEEE International Conference on Consumer Electronics (ICCE 2016), Las Vegas, January 2016, pp. 487 – 490.
    - Online: https://ieeexplore.ieee.org/document/7430687

- <u>Jing Pang</u>, "Review of Microcontroller Based Intelligent Traffic Light Control," 2015 12th International Conference & Expo on Emerging Technologies for a Smarter World (CEWIT 2015), New York, October 2015, pp. 1 – 5.   Online: http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7338166

- <u>Jing Pang</u>, "Active Learning in the Introduction to Digital Logic Design Laboratory Course", 2015 American Society for Engineering Education Zone III Conference, Springfield, Missouri, September 2015, pp. 1 – 10.
    - Online: http://www.asee.org/documents/zones/zone3/2015/Active-Learning-in-the-Introduction-to-Digital-Logic-Design-Laboratory-Course.pdf

- <u>Jing Pang</u>, "Critical Thinking Pedagogy in Teaching Computer Hardware Design Course", 2015 American Society for Engineering Education Pacific Southwest Section Conference, San Diego, California, April 2015, pp. 28 – 37.
    - Online: https://psw.asee.org/AnnualConference/asee-psw2015ConfProceedings.pdf

- Jing Pang, "Visualization and Computer Aided Design Techniques for Teaching Computer Hardware Design Course", The 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14), Las Vegas, Nevada**,** July 2014, pp. 326 – 329.
  - Online: http://worldcomp-proceedings.com/proc/p2014/FEC2838.pdf
  - Online: http://worldcomp-proceedings.com/proc/proc2014/fecs/FECS_Papers.pdf

- Jing Pang, Amy Qiaoming Liu, "Critical Thinking Strategies in Teaching Advanced Timing Analysis Course", The 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14), Las Vegas, Nevada**,** July 2014, pp. 407 – 411.
  - Online: http://worldcomp-proceedings.com/proc/p2014/FEC7256.pdf
  - Online: http://worldcomp-proceedings.com/proc/proc2014/fecs/FECS_Papers.pdf

- Jing Pang, I. Singh, "Accelerometer Based Real-Time Remote Detection and Monitoring of Hand Motion",
  - Proceedings of the World Congress on Engineering and Computer Science 2011, San Francisco, California, Oct. 19-21, 2011, Vol. II, pp. 744 – 747.
  - Online: http://www.iaeng.org/publication/WCECS2011/WCECS2011_pp744-747.pdf

- Jing Pang, Joseph Benjamin, Priteshkumar Janakkumar Modi, "The GPS Mobile Monitor System", 2010 International Conference on Embedded Systems and Applications (ESA'10), Las Vegas, Nevada,
  - July 12-15, 2010, pp. 49 – 54.
  - Online: http://www.gbv.de/dms/tib-ub-hannover/646462474.pdf
  - https://worldacademyofscience.org/worldcomp10/ws/program/esa15.html

- Jing Pang, Manuel Pravin, Robert Tanihaha, "MicroBlaze Soft Core Based FPGA Embedded System Design of Tetris Game", 2010 International Conference on Embedded Systems and Applications (ESA'10), Las Vegas, Nevada, July 12-15, 2010, pp. 79 – 85.
  - Online: http://www.gbv.de/dms/tib-ub-hannover/646462474.pdf

- Jing Pang, and Shitalben Chauhan, "FPGA Design of Speech Compression By Using Discrete Wavelet Transform", Proceedings of the World Congress on Engineering and Computer Science 2008, San Francisco, California, Oct. 22 - 24, 2008, pp. 151 – 156.
  - Online: http://www.iaeng.org/publication/WCECS2008/WCECS2008_pp151-156.pdf

- Jing Pang, and Gaurav Sutaria, "FPGA Based Two Dimensional Convolution", Track 625-108, IASTED International Conference on Circuits and Systems (CS 2008), Kailua-Kona, Hawaii, August 18 – 20, 2008, pp. 78 – 82.   Online: http://www.iasted.org/conferences/servepdf-625.html?name=PreliminaryProgram.pdf

- Jing Pang, "Fixed-Point Audio Notch Filter Design", 2008 International Conference on Embedded Systems and Applications (EAS'08), Las Vegas, Nevada, July 14-17, 2008, pp. 274 – 278.
  - Online: http://www.iasted.org/conferences/servepdf-625.html?name=PreliminaryProgram.pdf

- Jing Pang, Kimo Ah Yun and Mark Stoner, "Use Wrong Examples as a Tool for Teaching", 2008 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'08), Las Vegas, Nevada, July 14-17, 2008, pp. 217 – 221.
  - Online: http://dblp2.uni-trier.de/db/conf/fecs/fecs2008.html

- Jing Pang, Kimo Ah Yun, Mark Stoner, "Efficient Teaching of Advanced Logic Design Course Using Block Diagram", The 6th Annual Hawaii International Conference on Education (HICE), Honolulu, Hawaii, January 5-8, 2008, pp. 1417 – 1424.
  - Online: http://hiceducation.org/wp-content/uploads/2016/05/2008-Final-Program.pdf

- Milica Markovic, Jing Pang, Tom Matthews, JP Bayard, Dave Margolis, Pradeep Setlur, and S. K. Ramesh, "Work in Progress- Area Level Assessment Process", Proceedings of the 35th IEEE Frontiers in Education Conference**,** Session T3-C, Indianapolis, October 2005, pp. T3C 1 – 2.

- Online: http://ieeexplore.ieee.org.proxy.lib.csus.edu/stamp/stamp.jsp?tp=&arnumber=1611925

- <u>Jing Pang</u>, "The Integration of the Complex Programmable Logic Devices with the Introduction to Digital Logic Design Course", Proceedings of the 2005 American Society for Engineering Education Annual Conference and Exposition, Session 1793. Portland, Oregon, June 2005.
    - Online: https://peer.asee.org/the-integration-of-the-complex-programmable-logic-devices-with-the-introduction-to-digital-logic-design-course

- <u>Jing Pang</u>, Janusz A. Starzyk, "Fast Direct GPS Signal Acquisition Using FPGA", Proceedings of the 16th European Conference on Circuit Theory and Design (ECCTD'03), Krakow, Poland, Sep. 1 – 4, 2003.

- <u>Jing Pang</u>, Janusz A. Starzyk, "P-code Generator FPGA Design for Direct GPS P(Y)-Code Acquisition", 12th International Conference on Field Programmable Logic and Applications 2002 (FPLA'02), Berlin, Germany: Springer-Verlag, 2002, pp. 925 – 939.

- Janusz A. Starzyk, <u>Jing Pang</u>, "Evolvable Binary Artificial Neural Network for Data Classification", Proceedings of the 2000 International Conference on Parallel and Distributed Processing Techniques and Apllications, Las Vegas, Nevada, June 2000, pp. 1353 – 1360.

- Janusz A. Starzyk, <u>Jing Pang</u>, "Fault Diagnosis in Analog and Mixed Mode Low Testability Systems", Proceedings of the 2000 IEEE International Symposium on Circuits and Systems, Geneva, Switzerland, 2000, pp. II-649 – II-652.

- Janusz A. Starzyk, <u>Jing Pang</u>, Giolio Fedi, Riccardo Giomi, Stafana Manetti, Maria Cristina Piccirilli, "A Software Program for Ambiguity Group Determination in Low Testability Analog Circuits", Proceedings of the 1999 European Conference on Circuit Theory and Design (ECCTD'99), August 29th - September 2nd, Stresa - Italy , 1999, pp. 603 – 606.

BEST PAPER AWARDS

- <u>Jing Pang</u>, and Shitalben Chauhan, "FPGA Design of Speech Compression By Using Discrete Wavelet Transform", Proceedings of the World Congress on Engineering and Computer Science 2008 (**ICCS'08**), San Francisco, California, Oct. 22 - 24, 2008, pp. 151 – 156.   (**ICCS'08 Best Paper Award**)
  Online: http://www.iaeng.org/WCECS2008/awards.html

- <u>Jing Pang</u>, "Spectrum Energy Based Voice Activity Detection," 2017 IEEE 7th Annual Computing and Communication Workshop and Conference (CCWC 2017), Las Vegas, January 2017, pp. 1 – 5.

  (**CCWC 2017 Best Paper Award**)

MEDIA ARTICLES/APPEARANCES

- My research work was referred in Digi-Key website article:
  "In a recent paper presented by **J. Pang** and I. Singh at the World Congress on Engineering and Computer Science 2011 (Proceedings Volume II), the authors describe ***a new solution*** using the ADXL345 in combination with a RabbitCore RCM3365 board as web server to detect and monitor hand motion in real time", <u>Sensor Solutions for Medical Design Projects</u>, by Carolyn Mathas, Electronic Products, Jan. 5, 2012
    - Online: https://www.digikey.com/en/articles/techzone/2012/jan/sensor-solutions-for-medical-design-projects

  Digi-Key is the fourth largest electronic component distributor in North America and a broadline distributor of board level components. It ranks as the 8th largest electronic component distributor in the world.
  Reference: http://en.wikipedia.org/wiki/Digi-Key

Other Awards

- Li Fushan Scholarship for top #1 student in Electrical Engineering Department, Xi'an Jiaotong University, 1991
- Entrance exam to graduate school waived due to excellence,   1993.

GRANTS

- Faculty Professional Development Fund $10,350.00, 2016 - 2017
- CSUS Faculty Professional Development Funds, $5,175, Fall 2016
- CSUS COOL4 ED Faculty Grant Program, $1,000, Fall 2015 – Spring 2016
- Registration Fee waiver for 2015 12th International Conference & Expo on Emerging Technologies for a Smarter World (CEWIT 2015), estimated conference registration fee waiver of $500
- 2015, UCConnect Summer Research Program at Cal Poly Pomona research fund of $2,000
- 2015, UCConnect Summer Research Program at Cal Poly Pomona research student scholarship of $3,000
- 2015, CSUS College of Engineering and Computer Science Dean's Office Research Matching fund of $5,000
- 2015, Equipment and software donation from Xilinx company, $2,699
- 2015, CSUS Center of Teaching and Learning Summer Institute award
- 2014, CSUS Center of Teaching and Learning Faculty Learning Community grant, $700
- 2013, Equipment donation from Xyratex International, Inc., $2,000
- 2012, Equipment donation from Micron company, $19,895
- 2010, Promotion Development Award from CSUS Academic Affairs, $500
- 2009, Equipment donation from PMC-Sierra company, $91,659
- 2008, Equipment donation from three different companies: Xilinx, Altera, Thomas Grass Valley, $23,000
- 2008, CSUS University Enterprise, Inc. (UEI) Fund for Professional Development Effort, $500
- 2005, CSUS Faculty and EEE Department Travel Grants for Presenting at Conference, $2,000
- Summer 2004, Department of Electrical and Electrical Engineering Grant, $5,000

TEACHING EXPERIENCE

Courses Taught at California State University, Sacramento
- "Introduction to Logic Design",   CPE/EEE 64
- "Introduction to Logic Design Lab",   CPE/EEE 64 Lab
- "Advanced Logic Design",   CPE166/EEE270
- "Advanced Logic Design Lab",   CPE166/EEE270 Lab
- "Introduction to Microprocessors",   EEE174
- "Advanced Computer Architecture",   EEE280
- "Advanced Timing Analysis",   CPE/EEE274
- "Audio and Video Coding and Compression",   EEE296S
- "Digital Speech Processing",   EEE296T
- "Computer Hardware Design",   CPE186
- "Introduction to Computer Vision",   EEE178
- "Signals & Systems",   EEE180

PROFESSIONAL AFFILIATIONS

- Member, Institute of Electrical and Electronic Engineers (**IEEE**)
- Member, IEEE P1076 Working Group VHDL Analysis and Standardization Group, 2015

SERVICE TO INSTITUTION

EEE Department and Computer Engineering Program Service

- Chair, EEE Department Faculty Search Committee, Fall 2021 - Current
- Chair, EEE Department Assessment Committee, Spring 2022 - Current
- Member, EEE Department Assessment Committee, 2014 – Fall 2021
- Member, EEE Department Curriculum Committee, 2009 – 2013
- Member, EEE Graduate Program Committee, 2009 – 2012
- Alternate Member, EEE Department Hiring Committee, Fall 2014
- Member, EEE Department Ad Hoc Committee, 2015
- Member, EEE Department Equipment Committee, 2009 – 2013
- Member, EEE Comprehensive Exam Committee
- Provided comprehensive exam problems each semester for EEE and CPE Master students
- Visited Intel, HP, PMC-Sierra, and California Franchise Tax Board, talked with managers and alumni to get feedback on our EEE and CPE curricula
- Supervised EEE and CPE Master projects
- Advised EEE and CPE students

ECS College Service

- Personnel Board Member, College of Engineering and Computer Science RTP
  Fall 2016 – Spring 2018, Fall 2019 – Current
- EEE Representative of ECS College Space Committee, 2017 – Current
- Chair, College of Engineering and Computer Science Associate Dean Search Committee, 2015
- College of Engineering and Computer Science Webpage Coordinator, Summer 2015
- Chair, College of Engineering and Computer Science Scholarship Award Committee, 2015
- Member, College of Engineering and Computer Science Outstanding Faculty Award Committee, 2008 – 2009.
- Member, College of Engineering and Computer Science Scholarship Award Committee, 2009 – 2015
- Member, College of Engineering and Computer Science Grade Appeals Committee, 2009 – 2014
- Member, College of Engineering and Computer Science Academic Council, 2004 – 2008
- Evaluator of Computer Engineering Senior Project Oral Presentation for future ABET visit, 2007

University Service

- Chair, Wang Family Excellence Award Subcommittee, Fall 2021 - Current
- Vice Chair, Wang Family Excellence Award Subcommittee, Fall 2019
- Chair, CSUS Student Retention and Graduation Subcommittee, Fall 2017 – Spring 2019
- Vice Chair, CSUS Student Retention and Graduation Subcommittee, Fall 2016 – Spring 2017
- Member, Wang Family Excellence Award Subcommittee, Fall 2018 – current
- Faculty Consultant, Office of Academic Program Assessment, Division of Academic Affairs, Fall 2016-Fall 2017
- Member, ECS Representative for CSUS Student Retention and Graduation Subcommittee, 2015 – current
- EEE Senator Representative, CSUS Senate Committee, Fall 2021 - Current
- Alternate Member, CSUS Senate Committee, 2015 – Spring 2021
- Juror for CSUS Student Research Challenge, 2012
- Member, CSUS Curriculum Policies Committee, 2009 – 2011

- CSUS Research and Creative Activity Award Reviewer, 2003, 2005
- CSUS Pedagogy Enhancement Award Reviewer, 2005

SERVICE TO PROFESSIONAL COMMUNITY

- Reviewer of Journal of Supercomputing by Springer, 2011-Current
- Reviewer of Journal of Information Processing Systems, 2015
- Reviewer of IEEE First International Smart Cities Conference, 2015
- Reviewer of 2015 American Society for Engineering Education (ASEE) Zone III Conference, 2015
- Reviewer of 2015 Progress in Applied Mathematics in Science and Engineering (PIAMSE) Conference, 2015
- Committee Member, 2015 Pacific Southwest Section (PSW) of the American Society for Engineering Education (ASEE) Pacific Southwest Conference, 2015
- Technical Committee Member and reviewer of 2014 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA), 2014
- Program Committee Member, Track Chair and Reviewer of 5th International Conference on Computing Communication and Networking (ICCCNT'14), 2014
- Committee Member, International Conference on Circuits and Systems, 2010 - 2019
- Reviewer of IEEE Transactions on Wireless Communication, 2013
- Reviewer of 2013 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA), 2013
- Reviewer of 2012 IEEE Symposium on Industrial Electronics and Applications (ISIEA), 2012
- Reviewer of Journal of Digital Signal Processing, 2011-2012
- Reviewer of Journal of Sensors, June, 2013
- Reviewer of Journal of Sensors, December, 2011
- Session Co-Chair of SESSION 9-FECS, The 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14), 2014
- Session Chair of SESSION 11, The 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14), 2014
- Session Chair of ICCS III, International Conference on Circuits and Systems 2011 (ICCS'11), 2010
- Session Chair of SESSION 4-ESA, 2010 International Conference on Embedded Systems and Applications (ESA'10), 2010
- Circuit System Session Chair, World Congress on Engineering and Computer Science (WCECS2008), 2008
- Digital Circuits Session Chair, IASTED International Conference on Circuits and Systems (CS'08), 2008
- Session Chair, International Conference on Circuits and Systems (ICCS'08), 2008

SERVICE TO LOCAL COMMUNITY

- Served as Roseville Boy Scout Membership Chair for 2020
- Served as scientific judge for Sacramento School of Engineering & Sciences, 2015
- Served as scientific judge for Pacific Technology School Orangevale in 2012
- Served as scientific judge for West Campus High School in 2008
- Visited Sacramento Hiram W. Johnson High School in 2007
- Served as scientific judge for 2006 Sacramento Regional Science Bowl with high school competitors
- Served as a board member for California E-Resources (CCER) Group in Sacramento from 2005 to 2006.