Changzhi Li, PhD

Department of Electrical & Computer Engineering
Texas Tech University Box 43102, Lubbock, TX 79409-3102
Ph: 806-834-8682; Fax:806-742-1245
Email: changzhi.li@ttu.edu
Webpage: http://www.webpages.ttu.edu/chali

Professional Preparation

Zhejiang University	B.S.	Electrical and Computer Engineering, 2004
University of Florida	M.S.	Electrical and Computer Engineering, 2007
University of Florida	Ph.D.	Electrical and Computer Engineering, 2009

Appointments

Associate Professor	Electrical & Computer Engineering, Texas Tech University, 2014 – .
Assistant Professor	Electrical & Computer Engineering, Texas Tech University, 2009 –2014.
RFIC Designer	Coherent Logix inc., Austin, TX, Jun 2009 – Aug 2009.
RFIC Designer	Alereon inc., Austin, TX, May 2008 – Aug 2008.
System Engineer	Alereon inc., Austin, TX, May 2007 – Aug 2007.

Products

5 products closely related to the proposed project (selected from 180 published papers):

[1] G. Wang, C. Gu, T. Inoue, **C. Li**, "A Hybrid FMCW-Interferometry Radar for Indoor Precise Positioning and Versatile Life Activity Monitoring," *IEEE Transactions on Microwave Theory and Techniques*, vol. 62, no. 11, pp. 2812 - 2822, November 2014.

[2] C. Gu, **C. Li**, "From Tumor Targeting to Speech Monitoring: Accurate Respiratory Monitoring Using Medical Continuous-Wave Radar Sensors," *IEEE Microwave Magazine*, vol. 15, no. 4, pp. 66-76, June 2014.

[3] **C. Li**, V. M. Lubecke, O. Boric-Lubecke, J. Lin, "A Review on Recent Advances in Doppler Radar Sensors for Noncontact Healthcare Monitoring," *IEEE Transactions on Microwave Theory and Techniques*, vol. 61, no. 5, pp. 2046-2060, May 2013.

[4] C. Gu, R. Li, H. Zhang, A. Y. C. Fung, C. Torres, S. B Jiang, **C. Li**, "Accurate Respiration Measurement Using DC-Coupled Continuous-Wave Radar Sensor for Motion-Adaptive Cancer Radiotherapy," *IEEE Transactions on Biomedical Engineering*, vol. 59, no. 11, pp. 3117-3123, Nov. 2012.

[5] **C. Li**, J. Cummings, J. Lam, E. Graves, W. Wu, "Radar Remote Monitoring of Vital Signs", *IEEE Microwave Magazine*, vol. 10, issue 1, pp. 47-56, February 2009.

5 other products:

[6] L. Lu, B. Vosooghi, J. Chen, **C. Li**, "A Subthreshold-MOSFETs-Based Scattered Relative Temperature Sensor Front-End with a Non-Calibrated ±2.5 ^{0}C 3σ Relative Inaccuracy from -40 ^{0}C to 100 ^{0}C," *IEEE Transactions on Circuits and Systems I: Regular Papers*, vol. 60, no. 5, pp. 1104-1112, May 2013.

[7] **C. Li**, X. Yu, C. Lee, L. Ran, J. Lin, "High Sensitivity Software Configurable 5.8 GHz Radar Sensor Receiver Chip in 0.13 μm CMOS for Non-contact Vital Sign Detection," *IEEE Transactions on Microwave Theory and Techniques*, vol. 58, issue 5, pp. 1410-1419, May 2010.

[8] **C. Li**, J. Ling, J. Li, J. Lin, "Accurate Doppler Radar Non-contact Vital Sign Detection Using the RELAX Algorithm", *IEEE Transactions on Instrumentation and Measurement*, vol. 59, issue 3, pp. 687-695, March 2010.

[9] **C. Li**, J. Lin, "Random Body Movement Cancellation in Doppler Radar Vital Sign Detection," *IEEE Transactions on Microwave Theory and Techniques*, vol. 56, issue 12, pp. 3143-3152, December 2008.

[10] **C. Li**, Y. Xiao, J. Lin, "Experiment and Spectral Analysis of a Low-Power Ka-Band Heartbeat Detector Measuring from Four Sides of a Human Body," *IEEE Transactions on Microwave Theory and Techniques*, vol. 54, no. 12, pp. 4464-4471, December 2006.

Synergistic Activities

IEEE MTT-S	Chair of the Graduate Fellowship in Medical Applications Committee for IEEE MTT-S; Vice Chair of the 'MTT-10 Biological Effect and Medical Applications of RF and Microwave' committee; Demo Track Chair for the IEEE Radio Wireless Week; Received the IEEE MTT-S Graduate Fellowship in 2008 for work on the microwave Doppler radar vital sign detection technology; Serving as Chair of International Microwave Symposium (IMS) Technical Program Review Committee (TPRC)-34: RF systems and instrumentation for healthcare applications.
Student Mentoring	Mentored exchange students from Universidad de Puerto Rico to conduct research at TTU in the summer of 2014; Mentored students to receive seven best paper awards in IEEE conferences; Serving as a mentor for the TTU Clark Scholars Program to supervise high school students for summer research; Served multiples times as a judge for the Science & Engineering Fair in Texas.
Editorial Activities	Associate Editor for IEEE TCAS-I; Past Associate Editor for IEEE TCAS-II; Guest Editor for IEEE T-MTT Special Issue on "Emerging RF Measurement Techniques and Applications" in 2016; Guest Editor for Sensors Special Issue on "Non-contact Sensing"; Reviewer for IEEE T-MTT, IEEE TBME, IEEE TIM, IEEE TIE, IEEE MWCL, IEEE PTL, Electronic Letters, IEEE EMBS, IEEE ISCAS etc.
TPC Chair/Member	TPC Co-Chair/Chair for 13th/14th Annual IEEE Wireless and Microwave Technology Conference, 2012/2013; TPC member and session Chair for conferences including IEEE Wireless and Microwave Technology Conference, IEEE Topical Conference on Wireless Sensors and Sensor Networks, IEEE Topical Conference on Biomedical Wireless Technologies, Networks & Sensing Systems, SPIE Radar Sensor Technology Conference.
Selected Awards	IEEE Sensors Council Early Career Technical Achievement Award, 2016 IEEE-HKN Outstanding Young Professional Award, 2014 Frederick Emmons Terman Award (ASEE), 2014 National Science Foundation Faculty CAREER Award, 2013 IEEE Microwave Theory and Techniques Society Graduate Fellowship, 2008.

Collaborators & Other Affiliations

Collaborators and Co-Editors (within the last 48 months):

A. Fung (Texas Tech University), R. Gómez García (University of Alcalá, Spain), T. Inoue (National Instruments), J. Lin (Univ. of Florida), R. Li (Stanford University School of Medicine), D. Liang (Texas Tech University), J. Lin (Univ. of Florida), O. Boric-Lubecke (Univ. of Hawaii), V. M. Lubecke (Univ. of Hawaii), J. M. Muñoz Ferreras (University of Alcalá, Spain), R. Pal (Texas Tech University), L. Ran (Zhejiang University), J.A. Rice (University of Florida), C. Torres (Texas Tech University), W. Waldo (yearONE, LLC), H. Zhang (University of North Texas),.

Graduate Advisor:

Prof. Jenshan Lin, University of Florida

Thesis Advisor

Li Lu (PhD, currently with Qualcomm), Changzhan Gu (PhD, currently with Google), Yihong Yang (PhD, currently with Synaptics), Guochao Wang (PhD, currently with Maxlinear), Abhishek Angadi (MS, currently with Qualcomm), Satyabh Mishra (MS, currently with Qualcomm), Chong Wee (MS, currently with Spansion), Stephen Rodriguez (MS, currently with Texas Instruments), Sharmi Banerjee (MS, currently with Virginia Tech), Devashish Deshpande (MS, currently with Qualcomm), Bozorgnehr Vosooghi (MS, currently with University of Houston), Krishna Kannaya Kailash (MS, currently with Intel), Juan Rodriguez (MS, currently with Intel), Chenhui Liu (MS, currently with Qualcomm), Supreet Juneja (MS, currently with Intel).