Changzhi Li

Education

PhD Electrical & Computer Engineering, University of Florida, 2009
MS Electrical & Computer Engineering, University of Florida, 2007
BS Information & Electronic Engineering, Zhejiang University, China, 2004.

Academic Experience

- **Assistant Professor,** Dept. of Electrical & Computer Engineering, Texas Tech University, September 2009 – August 2014.
- **Associate Professor,** Dept. of Electrical & Computer Engineering, Texas Tech University, September 2014 – August 2020.
- **Professor,** Dept. of Electrical & Computer Engineering, Texas Tech University, August 2020 – present.

Non-Academic Experience

- **Consultant** for the University of Florida: analog IC design for DARPA MELD project, June 2016 – June 2017.
- **Consultant** for GP Strategies/Texas Instruments, Dallas TX: analog IC design lecturer, May 2013 – August 2013.
- **Consultant** for DIS semiconductor, Austin TX: RFIC design, May 2012 – August 2012.
- **Intern**, Coherent Logix inc., Austin, TX, Jun 2009-Aug 2009.
- **Intern**, Alereon inc., Austin, TX, May 2008-Aug 2008, May 2007-Aug 2007.

Current membership in professional organizations

- Senior Member, IEEE

Honors and Awards

- IEEE Microwave Theory and Techniques Society (MTT-S) Distinguished Microwave Lecturer, Tatsuo Itoh class of 2022-2024.
- IEEE Microwave Theory and Techniques Society (MTT-S) Outstanding Young Engineer Award, 2018.
- IEEE Sensors Council Early Career Technical Achievement Award, 2016.
- Texas Tech University Teaching Academy Member, elected 2016.
- Chancellor's Council Distinguished Research Award, Texas Tech University, 2015.
- George T. and Gladys Abell-Hanger Faculty Award, TTU Whitacre College of Engineering, 2015.
- IEEE-HKN Outstanding Young Professional Award, 2014.
- Frederick Emmons Terman Award (ASEE), 2014.
- Whitacre Research Award, Texas Tech University, 2014.
- National Science Foundation (NSF) Faculty CAREER Award, 2013.
- Texas Tech Alumni Association New Faculty Award, 2012.
- IEEE Microwave Theory and Techniques Society (MTT-S) Graduate Fellowship, 2008.

Service Activities

- Chair, Electrical and Computer Engineering Biomedical Faculty Search Committee (2021-2022)
- Electrical and Computer Engineering Department Chair Search Committee (2020-2021)
- Mechanical Engineering Faculty Search Committee in Control Area (2018~2019)
- Computer Engineering Curriculum Committee (ECE Department), 2010.
- Electromagnetics & Power Subcommittee (ECE Department), 2011-present.

Important Publications from the Past Five Years

[1] P. Nallabolu and C. Li, "A Frequency-Domain Spoofing Attack on FMCW Radars and Its Mitigation Technique Based on a Hybrid-Chirp Waveform," *IEEE Transactions on Microwave Theory and Techniques*, vol. 69, no. 11, pp. 5086-5098, Nov. 2021, doi: 10.1109/TMTT.2021.3115804.

[2] D. V. Q. Rodrigues, D. Zuo, C. Li, "Wind-Induced Displacement Analysis for a Traffic Light Structure Based on a Low-Cost Doppler Radar Array," *IEEE Transactions on Instrumentation and Measurement*, vol. 70, pp. 1-9, 2021, Art no. 6503909, doi: 10.1109/TIM.2021.3098380.

[3] C. Li, V. M. Lubecke, O. Boric-Lubecke, J. Lin, "Sensing of Life Activities at the Human-Microwave Frontier," *IEEE Journal of Microwaves*, vol. 1, no. 1, pp. 66-78, 2021, doi: 10.1109/JMW.2020.3030722.

[4] J. Wang, D. Rodriguez, A. Mishra, P. R. Nallabolu, T. Karp and C. Li, "24-GHz Impedance-Modulated BPSK Tags for Range Tracking and Vital Signs Sensing of Multiple Targets Using an FSK Radar," *IEEE Transactions on Microwave Theory and Techniques*, vol. 69, no. 3, pp. 1817-1828, March 2021, doi: 10.1109/TMTT.2020.3045201.

[5] D. Rodriguez, M. Saed and C. Li, "A WPT/NFC-Based Sensing Approach for Beverage Freshness Detection Using Supervised Machine Learning," *IEEE Sensors Journal*, vol. 21, no. 1, pp. 733-742, 1 Jan. 2021, doi: 10.1109/JSEN.2020.3013506.

[6] D. Rodrigues, D. Zuo, Z. Tang, J. Wang, C. Gu, C. Li, "Adaptive Displacement Calibration Strategies for Field Structural Health Monitoring Based on Doppler Radars," *IEEE Transactions on Instrumentation and Measurement*, vol. 69, no. 10, pp. 7813-7824, Oct. 2020, doi: 10.1109/TIM.2020.2982233.

[7] D. Rodriguez, C. Li, "Sensitivity and Distortion Analysis of a 125-GHz Interferometry Radar for Sub-Micrometer Motion Sensing Applications," *IEEE Transactions on Microwave Theory and Techniques*, vol. 67, no. 12, pp. 5384-5395, December 2019.

[8] A. Mishra, W. McDonnell, J. Wang, D. Rodriguez, C. Li, "Intermodulation-based Nonlinear Smart Health Sensing of Human Vital Signs and Location" *IEEE Access*, vol. 7, no. 1, pp. 158284-158295, December 2019.

Recent Professional Development Activities

- Associate Editor, IEEE Transactions on Microwave Theory and Techniques, 2019–present.
- Associate Editor, IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2017–present.
- Associate Editor, IEEE Transactions on Circuits and Systems I, 2016–present
- Associate Editor, IEEE Transactions on Circuits and Systems II, 2014–2015
- TPC Chair, IEEE Radio Wireless Week (RWW), 2022
- Chair, Frederick Emmons Terman Award (ASEE) committee, 2015