

## JENSHAN LIN

### **A. Professional Preparation**

UCLA, Los Angeles	Electrical Engineering	Postdoctoral Fellow, April-June 1994
UCLA, Los Angeles	Electrical Engineering	PhD, March 1994
UCLA, Los Angeles	Electrical Engineering	MS, December 1991
NCTU, Taiwan	Electrophysics	BS, June 1987

### **B. Appointments**

Program Director, National Science Foundation	October 2016-October 2018
Professor, University of Florida	August 2007-present
Associate Professor, University of Florida	July 2003-August 2007
Technical Manager, Agere Systems	September 2001-June 2003
Technical Manager, Bell Laboratories, Lucent Technologies	December 2000-September 2001
Member of Technical Staff, Bell Laboratories, AT&T/Lucent Technologies	July 1994-November 2000

### **C. Products**

260 technical publications in peer-reviewed journals and conference proceedings. 15 patents awarded.

#### **Most closely related to the proposed project:**

1. J. Tu, T. Hwang and J. Lin, "Respiration Rate Measurement Under 1-D Body Motion Using Single Continuous-Wave Doppler Radar Vital Sign Detection System," in *IEEE Transactions on Microwave Theory and Techniques*, vol. 64, no. 6, pp. 1937-1946, June 2016.
2. J. Tu and J. Lin, "Fast acquisition of heart rate in non-contact vital sign radar measurement using time window variation technique," *IEEE Trans. Instrum. Meas.*, vol. 65, no. 1, pp. 112-122, January 2016.
3. C.-M. Nieh, C. Wei, and J. Lin, "Concurrent Detection of Vibration and Distance Using Unmodulated CW Doppler Vibration Radar with an Adaptive Beam-Steering Antenna," *IEEE Transactions on Microwave Theory and Techniques*, vol. 63, no. 6, pp. 2069-2078, June 2015.
4. 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, pp. 2046-2060, 2013. (Invited)
5. T. Kao, Y. Yan, T. Shen, A. Chen, J. Lin, "Design and Analysis of a 60-GHz CMOS Doppler Micro-Radar System-in-Package for Vital-Sign and Vibration Detection," *IEEE Transactions on Microwave Theory and Techniques*, vol. 61, no. 4, pp. 1649-1659, April 2013.

#### **Other significant products:**

6. T.-M. Shen, T. J. Kao, T.-Y. Huang, J. Tu, J. Lin, R.-B. Wu, "Antenna Design of 60-GHz Micro-Radar System-In-Package for Noncontact Vital Sign Detection," *IEEE Antennas and Wireless Propagation Letters*, vol. 11, pp. 1702-1705, 2012. (Invited)
7. G. Reyes, D. Wang, R. Nair, C. Li, X. Li, J. Lin, "VitalTrack: A Doppler Radar Sensor Platform for Monitoring Activity Levels," *IEEE Topical Conference on Biomedical Wireless Technologies, Networks, and Sensing Systems (BioWireless)*, pp. 29-32, Jan. 2012.
8. Y. Yan, L. Cattafesta, C. Li, J. Lin, "Analysis of Detection Methods of RF Vibrometer for Complex Motion Measurement," *IEEE Transactions on Microwave Theory and Techniques*, IMS2011 Special Issue, vol. 59, no. 12, pp. 3556-3566, December 2011.
9. X. Yu, C. Li, J. Lin, "Two-dimensional Noncontact Vital Sign Detection Using Doppler Radar Array Approach," *IEEE MTT-S International Microwave Symposium Digest*, pp. 1-4, June 2011.
10. J. Garnica, R. Chinga, J. Lin, "Wireless Power Transmission: From Far Field to Near Field," *Proceedings of IEEE, Special Issue on Wireless Power Technology, Transmission and Application*, vol. 101, no. 6, pp. 1321-1331, June 2013. (Invited)

## **D. Synergistic Activities**

### ***Main Activities***

Dr. Lin is a professor in the Department of Electrical and Computer Engineering at the University of Florida. Before joining University of Florida, he worked for Bell Labs in Murray Hill, New Jersey. His main research activities are radio frequency circuits, high-speed broadband circuits, integrated antennas, system-on-chip and system-in-package integration for various applications in wireless communications, broadband communications, wireless sensors, wireless power transfer, biology, and healthcare.

### ***Professional Leadership***

- Editor-in-Chief, IEEE Transactions on Microwave Theory and Techniques, 10/2013-present
- Editorial Advisory Board, Cambridge University Press RF and Microwave Engineering Series, 2013-present
- Chair, IEEE MTT-S Technical Committee on Wireless Energy Transfer and Conversion (2013-2015)
- Chair of Executive Committee of IEEE RFIC Symposium (2012-2013)
- Chair of IEEE MTT Society Technical Coordinating Committee (2010-2011)
- Elected AdCom Member of IEEE Microwave Theory and Techniques Society (2006-2011)

### ***Awards and Honors***

- IEEE Radio Frequency Integrated Circuits (RFIC) Symposium Tina Quach Outstanding Service Award, 2016
- Distinguished Alumnus Award, National Chiao Tung University, Taiwan, 2016
- IEEE Wireless Power Transfer Conference Best Paper Award, 2015
- Honorary Chair Professor, National Taiwan University of Science and Technology, 2014
- University of Florida Technology Innovator Awards, 2011, 2012, 2013, 2014, 2016
- Fellow of IEEE, 2010
- N. Walter Cox Award of IEEE Microwave Theory and Techniques Society, 2007
- ETA KAPPA NU Outstanding Young Electrical Engineer Award, 1997
- UCLA School of Engineering and Applied Science Outstanding Ph.D. Award, 1994

## **E. Collaborators & Other Affiliations**

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

K. Azadet (Intel), O. Boric-Lubecke (U. Hawaii), J. Guo (U. Florida), N. Gravenstein (U. Florida), L. Hayward (U. Florida), T.-S. Horng (NSYSU, Taiwan), A. Li (U. Florida), C. Li (TTU), V. Lubecke (U. Hawaii), S. Pearton (U. Florida), F. Ren (U. Florida), P. Riehl (MediaTek), S. Roy (U. Florida), D. Schreurs (KU Leuven), T. Tsai (CCU, Taiwan).

### **Graduate Advisor and Postdoctoral Sponsor**

Tatsuo Itoh (UCLA)

### **Thesis Advisor and Postgraduate-Scholar Sponsor**

C. Heagney (PhD May 2016), J. Tu (PhD 2015), C.-M. Nieh (PhD 2014), T. Hwang (PhD 2014), R. Chinga (PhD 2013), T. Kao (PhD 2013), C. H. Lee (PhD May 2012), Y. Yan (PhD 2012), X. Yu (PhD 2011), Z. Park (PhD 2011), G. Reyes (MS 2011), M. Chen (PhD 2010), J. Casanova (PhD 2010), A. Chen (PhD 2010), C. Li (PhD 2009), Z. N. Low (PhD 2009), L. Covert (PhD 2008), T. Chang (PhD 2008), H. Yeo (PhD 2007), S. Ko (PhD 2007), Y. Xiao (PhD 2007), X. Yang (PhD 2006), A. Verma (PhD 2006), J. Jun (MS 2006). Total of 20 PhD and 2 MS (with thesis) students advised.