

**Education:**

Ph.D., Electrical Engineering, California Institute of Technology, Pasadena, CA  
 Thesis: Micromechanical Tuning Elements for Submillimeter Wave Integrated Circuits  
 Advisor: Professor David B. Rutledge 1995

M.S., Electrical Engineering, California Institute of Technology, Pasadena, CA 1990

B.S., Electrical and Electronics Engineering, Cal Poly, Pomona, CA 1986

**Academic Appointments:**

University of Hawai'i, Manoa, Honolulu, HI, USA, Electrical Engineering Department  
 Professor 2012-Present  
 Associate Professor 2003-20012

California Institute of Technology, Pasadena, CA, USA, Electrical Engineering Department  
 Graduate Research Assistant, Graduate Teaching Assistant 1989-1995

**Non-Academic Appointments:**

Kai Sensors Inc., Honolulu, HI, USA (Co-founder, adviser) 2007-2009  
 Chief Technology Officer 2008-2009

Senscorp, Honolulu, HI, USA 2006-2007  
 Co-founder and Chief Technology Officer

Bell Laboratories, Lucent Technologies, Murray Hill, NJ, USA 1998-2003  
 Member of Technical Staff, Physical Sciences Research Division

The Institute of Physical and Chemical Research (RIKEN), Sendai, Japan 1996-1998  
 Visiting Member of the Research Staff, Photodynamics Research Center, SMMW Waves Group

NASA Jet Propulsion Laboratory, Pasadena, CA, USA 1995-1998  
 Observational Systems Division,  
 Member of Technical Staff, Submillimeter Wave Advanced Technology Team

NASA Jet Propulsion Laboratory, Pasadena, CA, USA 1987-1989  
 Telecommunications Science and Engineering Division,  
 Member of Technical Staff, Spacecraft RF Development Group

**Professional Affiliations:**

IEEE: MTTTS: Senior Member, Distinguished Microwave Lecturer, EMS: Member

**Honors/Awards:**

Student Paper Competition First Prize, Co-author, IEEE IMS-2003  
 Student Paper Competition Third Prize, Co-author, IEEE EMBS-2001  
 First Place Student Project, Mentor, Bell Labs Science Grant Mentoring Program 2002

Student Paper Competition Honorable Mention, Co-author, IEEE IMS-2001  
 Microwave Prize for best paper, Asia Pacific Microwave Conference, December 2000  
 NASA Graduate Student Researchers Program Fellowship, July 1992 – July 1994  
 NASA Tech Brief Technical Innovation Award, November, 1991  
 Selected member of Phi-Kappa-Phi and Eta-Kappa-Nu Honor Societies  
 Magna Cum Laude, Presidents and Deans Lists, Honors at entrance – Cal Poly Pomona

### Professional Service: (5 years)

Topic Editor, IEEE Transactions on Terahertz Science and Technology 2012-Present  
 Asia Pacific Microwave Conference Session Organizer, 2014  
 Steering Committee, IEEE-MTT International Microwave Symposium, 2003, 2007, 2017  
 Biomedical Applications Track Chair, IEEE-MTT Radio and Wireless Symposium 2010  
 Distinguished Microwave Lecturer, IEEE-MTT appointment for 2006-2009  
 Winter Technical Meeting Chair, IEEE-MTT 2005 – present  
 Technical Program Committee Member, IEEE-MTT Radio and Wireless Symposium 2007-2014  
 Technical Coordinating Committee Member, IEEE-MTT 2005 – present  
 COE Senate Sabbatical Committee, 2011-present  
 EE EP Track Coordinator, 2012-2013, EE Space Committee, 2009-present,  
 EE PEL development and renovations, 2009 – present  
 COE Faculty Senate Executive Committee (SEC), Chairmen, 2007-2009  
 United Cerebral Palsy HI, Support/volunteer; Hispanic Center of Hawaii, Activities/volunteer

### Selected Recent Publications:

- [1] E. Yavari, C. Song, V. M. Lubecke, and O. Boric-Lubecke, "Is There Anybody in There? Intelligent Radar Occupancy Sensors," *IEEE Microwave Magazine*, vol.15, no.2, pp.57-64, March-April 2014.
- [2] C. Li, V. M. Lubecke, O. Boric-Lubecke, and J. Lin, "A Review on Recent Advances in Doppler Radar Sensors for Noncontact Healthcare Monitoring," *IEEE Trans. on Microwave Theory Tech.*, Vol. 61, Issue: 5, Part: 2, pp. 2046- 2060, 2013.
- [3] A. Singh, X. Gao, E. Yavari, M. Zakrewski, X. Cao, V. M. Lubecke, and O. Boric-Lubecke, "Data-Based Quadrature Imbalance Compensation For a CW Doppler Radar System," *IEEE Trans. on Microwave Theory Tech.*, Vol. 61, No. 4, pp 1718-1724, 2013.
- [4] W. Massagram, N. Hafner, V. Lubecke, and O. Boric-Lubecke, "Tidal Volume Measurement through Non-Contact Doppler Radar with DC Reconstruction," *IEEE Sensors Journal*, Vol. 13, No. 9, pp. 3397 – 3404, 2013.
- [5] I. Mostafanezhad, E. Yavari, O. Boric-Lubecke, V. Lubecke, and D. Mandic "Cancellation of Unwanted Doppler Radar Motion Using Empirical Mode Decomposition," V. 13, N. 5, pp. 1897- 1904, *IEEE Sensors Journal*, 2013.
- [6] N. Hafner, , J. Drazen, and V. Lubecke, "Fish Heart Motion Measurements with a Body-Contact Doppler Radar Sensor," *IEEE Sensors Journal*, No. 99, June 2012.
- [7] A. Singh, and V. Lubecke, "Respiratory Monitoring and Clutter Rejection using a CW Doppler Radar with Passive RF Tags ," *IEEE Sensors Journal*, March 2011.
- [8] J. Kiriazi, O. Boric-Lubecke, and V. Lubecke, "Dual-Frequency Assessment of Cardiopulmonary Effective RCS and Displacement," *IEEE Sensors Journal*, March 2011.
- [9] V. Lubecke, F. Pardo, and V. Lifton, "Polyimide Spacers for Optical MEMS," *IEEE/ASME Journal of Microelectromechanical Systems*, Vol. 16, No. 4, pp. 959 – 968, August 2007.
- [10] B. K. Park, O. Boric-Lubecke, and V. Lubecke, "Arctangent Demodulation in Quadrature Doppler Radar Receiver System with DC Offset Compensation," *IEEE Trans. on Microwave Theory Tech.*, Vol. 55, No. 5, pp. 1073-1079, May 2007.
- [11] A.D. Droitcour, O. Boric-Lubecke, V. M. Lubecke, J. Lin and G. T. Kovacs, "Range Correlation and I/Q Performance Benefits in Single Chip Silicon Doppler Radars for Non-Contact Cardiopulmonary Monitoring," *IEEE Trans. on Microwave Theory Tech.*, Vol. 52, No. 3, pp. 838-848, March 2004.
- [12] V.M. Lubecke, K. Mizuno, and G.M. Rebeiz, "Micromachining for Terahertz Applications," *IEEE Transactions on Microwave Theory and Techniques*, Vol. 46, No. 11, Part 2, pp. 1821–1831, November 1998.