

Donald Y.C. Lie

EDUCATION

- Ph.D.** Electrical Engineering, California Institute of Technology, Pasadena, CA, 1995
- M.S.** Electrical Engineering, California Institute of Technology, Pasadena, CA, 1990
- B.S.** Electrical Engineering, National Taiwan University, Taipei, Taiwan 1987

Academic experience

- K.S. Lu Regents Chair Professor, ECE Dept., Texas Tech Univ., *Sept. 1, 12 – Present*
- Chair Professor, Nat'l Yangming Chiao-Tung Univ. (NYCU), Taiwan *Aug. 1, 2018 – Present*
- K.S. Lu Regents Chair Associate Prof. (tenured), Texas Tech Univ. *July 9, 07–Aug. 30, 12*
- Adjunct Prof., Dept. of Surgery, Texas Tech U. Health Sciences Center *Sept., 08 - Present*
- Visiting Lecturer, ECE Dept., Univ. of California, San Diego (UCSD) *Mar. 02- June 07*
- Head Teaching Assistant, California Institute of Technology *Sept. 90 - June 94*
- Graduate Research Assistant, California Institute of Technology *June 91 - Aug. 95*

Non-academic experience

- Director, RFIC Design and Test, Dynamic Research Corp. (DRC), CA *Mar. 05 - June 07*
- Director, RFIC Design and Test, SYS Technologies Inc., San Diego, CA *Dec. 03 - Mar. 05*
- Director, RFIC Design and Applications, Microtune Inc., San Diego, CA *Dec. 02 - Dec. 03*
- Consultant, Various IC Design Companies and Law Firms *Dec. 03 - Present*
- Design Manager, RFIC Design Group, Lincom Wireless Corp., CA *July. 02 - Nov. 02*
- Advisory RFIC Design Engineer, IBM Encinitas Design Center, CA *June 00 - July 02*
- Member of Technical Staff, RFIC, Silicon Wave (Now Qualcomm), CA *Jan. 99 - June 00*
- Staff Engineer, Rockwell International, Newport Beach, CA *Oct. 95 - Jan. 99*
- Semiconductor Research Corporation (SRC) Intern, Motorola Inc., AZ *June 94 - Oct. 94*
- Graduate Student Intern, Jet Propulsion Labs (JPL), Pasadena, CA *June 93 - Oct. 93*

Certifications or professional registrations

California state board professional engineer (PE) Engineer-in-Training. License NO.: XE097319

Current membership in professional organizations

- Fellow, IEEE (Institute of Electrical and Electronics Engineers) *Jan. 17- present*
- Senior Chapter Member, National Academy of Inventors (NAI) *2017 - present*
- Member, ASCO (American Society of Clinical Oncology) *Sept. 15- present*

Honors and awards

TTU Whitacre College of Engineering Research Award, 2022
The US NAVY SPAWAR SSC San Diego “Center Team Achievement Award”, Spring 2007
3 DRC Silver Awards of Excellence, 2005-2007
IBM "FIRST" chairman patent award, 2001-2002
Rockwell International's “FIRST” engineering awards, 1996-1998
Research Group has on 21 Best Graduate Student Paper Awards and Best Paper Awards in international conferences for 1994, 1995, 2006, 2008 (twice), 2010 (thrice), 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2019 (twice), 2020, 2021 (twice) and 2022.

Research group received the 1st Place of Texas Tech University Most Outstanding Master Thesis Award biennially in the Category of Math, Science, and Engineering for both 2016 and 2020.

Service activities

General Chair of IEEE RFIC Symp. 2022-23; VLSI-DAT 2015-17, BCTM 2014, SiRF 2014 Executive/Steering Committees of the IEEE RFIC Symp., SiRF, MWSCAS, Texas Wireless Symp.; TPC member for IEEE RWS, PAWR, SiRF, ISCAS, BIOCAS, ASICON, NIH-LiSSA.

Publications (Selected from past 5 years)

1. "Design of Broadband Highly Efficient Linear Power Amplifiers for mm-Wave 5G in 22nm FDSOI and 40 nm GaN/SiC", J. C. Mayeda, D.Y.C. Lie and J. Lopez, *Electronics*, 11(5), 683, 2022
2. "A Highly Efficient 18 - 40 GHz Linear Power Amplifier in 40 nm GaN for mm-Wave 5G", J. C. Mayeda, D.Y.C. Lie and J. Lopez, *IEEE Microwave and Wireless Components Letters (MWCL)*, vol. 31, no. 8, pp. 1008-1011, Aug. 2021
3. "Differentiation of Patients with Balance Insufficiency (Vestibular Hypofunction) vs. Normal Subjects Using a Low-Cost Small Wireless Wearable Gait Sensor", T. Q. Nguyen, J. H. Young, A. Rodriguez, S. Zupancic and D.Y.C. Lie, *Biosensors*, 2019, 9, 29
4. "A Review of 5G Power Amplifier Design at cm-Wave and mm-Wave Frequencies", D.Y.C. Lie, J. C. Mayeda, Y. Li and J. Lopez, Special Issue "RF Front-End Circuits and Architectures for IoT/LTE-A/5G Connectivity", *Wireless Communications and Mobile Computing*, Hindawi and Wiley, Vol. 2018, Article ID 6793814, 16 pages, (2018)
5. "Non-Contact Sensor for Long-Term Continuous Vital Signs Monitoring: A Review on Intelligent Phased-Array Doppler Sensor Design", T. Hall, **D.Y.C. Lie**, T.Q. Nguyen, J.C. Mayeda, P.E. Lie, J. Lopez and R.E. Banister, *Sensors*, 2017, 17, 2632

Professional Development

Special Issue Editor, Biosensors, 2017, 2018 and 2021

Author of the IEEE International Network Generations Roadmap (INGR) 5G Hardware Roadmap as one of the 12 members on the *5G Hardware Technical Working Group (TWG)*

AFRL Summer Faculty Fellowship Program (SFFP) at Dayton, Ohio, 2018

Associate Editor, IEEE Microwave and Wireless Components Letters, 2010-2017

Guest Editor, Wireless Communications and Mobile Computing, 2017

Guest Editor, IEEE Transaction on Microwave Theory and Techniques, 2017

Editorial Board Member, Biosensors since Nov. 2016

Special Topic Editor, IEEE Microwave and Wireless Components Letters (MWCL) in June 2012

Associate Editor-in-Chief, Open Journal of Applied Biosensor (OJAB), 2012-present

Lead Guest Editor, International Journal "Active and Passive Electronic Components",

Hindawi Publishing, 2010-2011

Editorial Board Member, Open Journal of Applied Biosensor (OJAB), 2010-2012

Area Editor-in-Chief, Int'l Journal on Wireless and Optical Communications, 2001-present

Guest Editor, IEEE Journal of Solid-State Circuits (JSSC), Sept. 2009

Won 5 DARPA subcontracts and 1 DARPA prime contract/grant at TTU and published three most downloaded TOP 100 papers on IEEE Xplore in Sept. 2012, June 2012, and Sept. 2009 (ranked #80, #88, and #21 for these 3 months, respectively).

Over 245 peer-review papers and book chapters published, with 7 awarded US patents.