

TSU-JAE KING LIU

Dean and Roy W. Carlson Professor of Engineering

EDUCATION STANFORD UNIVERSITY, Palo Alto, California, USA
1994 Ph.D. in Electrical Engineering
1986 M.S. in Electrical Engineering
1984 B.S. in Electrical Engineering

EXPERIENCE

7/18 to present UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Dean and Roy. W. Carlson Professor of Engineering, College of Engineering
Provide visionary and inspirational leadership to build community, enhance student experience, accelerate research & discovery, achieve financial sustainability for the College of Engineering.

10/16 to 6/18 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Vice Provost for Academic and Space Planning and Senior International Officer
Oversaw the overall programmatic direction of the university and its intersection with the use of space on campus; oversaw the campus' international agreements and partnerships.

Summer 2016 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Associate Dean for Academic Planning and Development, College of Engineering
Represented the College of Engineering (CoE) and assisted in its fundraising efforts. Served as liaison between CoE departments and potential sponsors/benefactors.

7/14 to 6/16 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Chair, Department of Electrical Engineering and Computer Sciences

7/12 to 6/16 *Chair*, Electrical Engineering Division

7/12 to 6/14 *Associate Chair*, Department of Electrical Engineering and Computer Sciences
Responsible for EECS Department programs, operations, strategic growth and relationships. Oversaw academic personnel actions within the Electrical Engineering Division.

7/08 to 6/12 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Associate Dean for Research, College of Engineering
Oversaw operations of the Engineering Research Support Organization which provides research administration support to faculty, research centers, and affiliated organized research units in the UC Berkeley College of Engineering. Facilitated new multi-disciplinary research initiatives, collaborations with international universities, and College development.

7/03 to present UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Professor, Electrical Engineering and Computer Sciences
Research and instruction in the areas of integrated-circuit devices and technology, micro/nano-electro-mechanical devices and technology, and large-area electronics.

1/12 to 12/12 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Faculty Director, UC Berkeley Marvell Nanofabrication Laboratory ("Nanolab")

8/06 to 6/08 *Faculty Director*, UC Berkeley Microfabrication Laboratory ("Microlab")

& 8/00 to 7/04 Responsible for overseeing lab operations and policies, setting new directions, and securing industry support (in the form of grants and equipment, service, and cash donations) for this shared cleanroom research facility. Liaison for faculty as well as industry members.

11/04 to 6/06 SYNOPSYS, INC., Mountain View, California, USA
Senior Director of Engineering, Advanced Technology Group
Development of new silicon technologies and associated intellectual property.

7/03 to 6/04 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Vice Chair for Graduate Matters, Electrical Engineering and Computer Sciences
Oversight and policy-setting for graduate admissions and the graduate study program.

5/00 to 10/04 PROGRESSANT TECHNOLOGIES, INC., Fremont, California, USA
Co-founder and President
Development and licensing of negative differential resistance transistor technology for low-cost, low-power integrated-circuit products. Negotiated sale of Progressant to Synopsys, Inc.

7/99 to 6/03 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Associate Professor, Electrical Engineering and Computer Sciences

- Research and instruction in the areas of integrated-circuit devices and technology, micro-electro-mechanical systems technology, and maskless ion beam lithography.
- 8/96 to 6/99 UNIVERSITY OF CALIFORNIA, Berkeley, California, USA
Assistant Professor, Electrical Engineering and Computer Sciences
 Research and instruction in the areas of integrated-circuit devices and technology, thin-film transistor technology, and micro-electromechanical systems technology.
- 4/92 to 7/96 XEROX PALO ALTO RESEARCH CENTER, Palo Alto, California, USA
Member of Research Staff
 Conducted research and development of polycrystalline Si (poly-Si) thin-film transistor (TFT) technologies for high-resolution, high-performance flat-panel display applications.

PUBLICATIONS AND PATENTS

- Over 500 publications (full list at <http://www.eecs.berkeley.edu/~tking/publications.html>)
 h-index = 86 (https://scholar.google.com/citations?user=IMUmE_UAAAAAJ&hl=en&oi=ao)
- 96 issued patents in integrated-circuit devices & technology (<http://www.eecs.berkeley.edu/~tking/patents.html>)

SELECTED AWARDS AND HONORS

- National Science Foundation (NSF) CAREER Award, 1998
- DARPA Significant Technical Achievement Award (with Chenming Hu and Jeffrey Bokor), 2000
- Outstanding Teaching Award (EE Division, EECS Department, UC Berkeley), 2003
- Fellow, Institute of Electrical and Electronics Engineers (IEEE), 2007
- UC Berkeley Distinguished Faculty Mentoring Award, 2010
- Semiconductor Industry Association University Research Award, 2014
- Semiconductor Research Corporation Aristotle Award, 2016
- Member, National Academy of Engineering, 2017; Member, National Academy of Inventors, 2018
- Silicon Valley Hall of Fame Inductee, 2019

STUDENT ADVISING

- Graduated 37 Ph.D. students and an additional 6 M.S. students; co-advised Ph.D. for an additional 15 students
- Mentored 12 post-doctoral researchers
- Current research group comprises 8 M.S./Ph.D. students

SELECTED DIVERSITY, EQUITY & INCLUSION ACTIVITIES

- *PI for UCB-HBCU program “Pathways to the Science & Engineering Doctorate” supported by UCOP
 - *Founding PI for “Transfer-to-Excellence” summer research program for community college students
 - Co-Founder of Women in Technology Initiative at the University of California (witi.berkeley.edu)
- * See <https://e3s-center.berkeley.edu/education-diversity/education/undergraduate/>

SELECTED UNIVERSITY SERVICE

- Senate: Graduate Council, 2007-2009; Committee on Academic Planning & Resource Allocation, 2012-2014
- Faculty Advisory Committee on Research Administration, 2012-2014
- Faculty Lead, UC Berkeley - Lam Research Corporation Partnership, 2008-2018
- Academic Advisory Committee, Bakar Fellows Program, 2012-present
- Faculty Director, Berkeley ShanghaiTech Education Collaboration program, 2013-2018
- Governing Board member, Berkeley Education Alliance for Research in Singapore, June 2016-present

SELECTED PROFESSIONAL ACTIVITIES

- Technical Program Committee Member, *IEEE Symposium on VLSI Technology*, 2005-2012
 - Short course co-organizer, 2009; Rump session co-organizer, 2010; Publication/publicity co-chair, 2012
 - Member, *Executive Committee of the VLSI Symposia*, 2015-present
- Editor-in-Chief, *IEEE Electron Device Letters*, 2016-2018
- Vice President for Publications and Products, IEEE Electron Devices Society, 2018-present
- Member, Board of Directors, Intel Corporation, July 2016-present
- Past/present consultant or technical advisory board member to various companies including Applied Materials (Santa Clara, CA); Crossbar Technologies Corp. (Santa Clara, CA); Tessera Technologies, Inc. (San Jose, CA)