

Dr. Anthony Kuh, Professor

Education

Ph.D. (1987) Electrical Engineering. Princeton University

M.A. (1984) Electrical Engineering and Computer Science. Princeton University

M.S. (1980) Electrical Engineering. Stanford University.

B.S. (1979) Electrical Engineering and Computer Science. University of California, Berkeley.

Academic and Industrial Experience

1986-present Professor (28 years in Electrical Engineering at University of Hawaii, 1986-1991 Assistant Professor, 1991-1997 Associate Professor, 1997-present Professor, 1998-1999 Graduate Chair, 1999-2002 and 2007-2012tChair).

2003-2004 Distinguished Fulbright Scholar and Visiting Professor (Imperial College, London, EEE Dept.)..

2005 Visiting Scholar (University of California, Berkeley, EECS Dept.)..

1988-1993 Consultant (Siemens Corporate Research, Princeton, NJ)..

1982-1986 Teaching and Research Assistant (Princeton University, NJ)..

1979-1982 Member of Technical Staff (Bell Telephone Laboratories, Network Performance Planning Center, Holmdel and South Plainfield NJ)..

Professional Affiliations:

IEEE: Member of Information Theory, Communications, Signal Processing, Circuits and Systems, Computational Intelligence Society, Power & Energy Society.

Member: Asia Pacific Signal and Information Processing Association

Honors and Awards:

College of Engineering Faculty Service Award, 2014.

Finalist: 2012 University of Hawaii Excellence in Teaching Award.

PI on winning proposal, "Integrated Research and Education in Renewable Energy and Island Sustainability", \$1,000,000, 2009-2011. for the first UHM sustainability competition.

IEEE Fellow: For contributions to the analysis of neural network models and their application to signal processing. (1998).

Member: Eta Kappa Nu, Tau Beta Pi.

Institutional and Professional Service (last five years):

Chair: 1999-2002, 2007-2012, Dept. of Electrical Engineering, University of Hawaii.

Director 2009-present, Renewable Energy and Island Sustainability Center, University of Hawaii.

Member, EE ABET committee 2009-2015, EE DPC 2013-2015.

Member, College of Engineering, Resource Allocation Committee 2013-2015, Research Committee 2013-2015. Strategic Planning Committee 2008-2009.

Member University Committees: Tenure Promotion and Review Committee: 2010-2011, 2014-2015, Univ. of Hawaii. Chancellor's Energy Committee 2014-present. Sustainability Working Group 2012-2014.

Senior Editorial Board: IEEE Journal of Selected Topics in Signal Processing, 2013-2015.

Associate Editor: APSIPA Transactions on Signal and Information Processing, 2014-2016.

Editor: Electrical and Computer Engineering Department Heads Association (ECEDHA) Newsletter, 2009-2010.

IEEE Signal Processing Society, Board of Governors, Regional Director at Large for Regions 1-6, 2013-2014.

Member: Board of Governors, Asia Pacific Signal and Information Processing Association, 2009-2015.

At large board member: ECEDHA, 2009-2012.

Reviewer: NSF proposals (NSF panelist), Fulbright proposals, IEEE Transactions on Neural Networks, IEEE Transactions on Signal Processing, Neural Networks, APSIPA Transaction on Signal and Information Processing.

Conference Organizer: 2014 Joint JST-NSF Workshop Distributed Energy Management Systems. Technical co-chair: 2014 APSIPA ASC.

Conference Program reviewer, IEEE ICASSP 2009, IEEE IJCNN 2009-2012, Fusion 2009-2011, SmartGrid-Comm 2012, APSIPA ASC 2012-2014.

IEEE Computational Intelligence Society Smart Grid Task Force 2011-2012.

Professional Development Activities (last five years) .

Grants: from NSF, DOE, ONR, Oahu Workforce. (more than \$3,000,000 as PI for external federal grants).

Graduate Students: Nate Kowahl (M.S. 2010), Ying Hu (M.S. 2011), Chris Manoloyo (M.S. 2012) Justin Carland (M.S. 2013). Current Ph.D. students: Sharif Uddin, Navid Tafaghodi, Seyyed Fatemi. Current M.S. students: Trevor Wilkey, Monica Umeda, Andy Pham, Matt Motoki, Sarah Yasui, Philip Troung.

Undergraduate Students: Chris Manoloyo, Ray Corpuz, Ben Ng, Matthew Menor, Chelsea Lau, Philip Troung, Sam Hu, Chi Jow, Adam Oberbeck Jimmy Cumming, Kenny Luong, Sean Hara, Zach Dorman, Conrad Chong, Daisy Green, Christie Obatake, Ryan Walser, Matthew Fall.

Teaching: Machine Learning, Renewable Energy & Island Sustainability Seminar, Undergraduate Machine Learning, Power Electronics, Probability & Statistics, Communications, Basic Circuits II.

Principle Publications (last five years)

M. Uddin, A. Kuh, A. Kavcic, and T. Tanaka. "Nested performance bounds and approximate solutions for the sensor placement problem" *APSIPA Transactions on Signal and Information Processing*, Vol. 3, e4, 13 pages, Mar. 17, 2014.

A. Kuh, "Renewable Energy and Island Sustainability (REIS) and the University of Hawai'i Smart Sustainable Microgrid Project, *Journal of Ecotechnology Research*, 17(2), 79-83, 2014.

J. Carland, M. Umeda, T. Wilkey, A. Oberbeck, J. Cumming, N. Parks, M. Fripp, A. Kuh, and D. Garmire, "Self-Sustaining Meteorological Wireless Sensor Networks", *Sensors and Transducers Journal*, Vol. 160-12, 118-124, Dec. 2013.

Y. Hu, A. Kuh, T. Yang, A. Kavcic. "A Belief Propagation Based Power Distribution System State Estimator", *IEEE Computational Intelligence Magazine*, Vol. 6, 3, 36-46, Aug. 2011.

D. Mandic, S. Javidi, S. L. Goh, A. Kuh and K. Aihara. "Complex Valued Prediction of Wind Profile Using Augmented Complex Statistics", *Renewable Energy*, Vol. 34, 1, 196-201, 2009.

35 Conference papers and presentations.