

Curriculum Vitae of Andrea J. Goldsmith

Contact Information:

Department of Electrical Engineering
Stanford University
Stanford, CA 94305-9515
Phone: 650 725 6932 (office), 650 766 8317 (cellular)
Fax: 650 724 3962
Email: andrea@ee.stanford.edu

Education:

Ph.D.	Electrical Engineering, University of California at Berkeley	1994
M.S.	Electrical Engineering, University of California at Berkeley	1991
B.S.	Electrical Engineering, University of California at Berkeley	1986

Professional Experience:

Stanford University, Stephen Harris Professor of Engineering	10/12 – Present
Accelera/Plume Wifi, Founder, CTO, Board of Directors	08/10 – 08/14
Stanford University, Professor	05/07 – Present
Quantenna Communications (QTNA), Founder, CTO, Board of Directors	09/05 – 07/09
Stanford University, Associate Professor	09/02 – 04/07
Stanford University, Assistant Professor	01/99 – 08/02
Memorylink Corporation, Chief Scientist	05/98 – 05/02
California Institute of Technology- Assistant Professor	09/94 – 12/98
University of California, Berkeley - Research Assistant	08/89 – 08/94
AT&T Bell Laboratories, Intern and Consultant	06/91 – 08/92
MAXIM Technologies, Systems Engineer	06/86 – 09/90

Awards and Honors:

- American Academy of Arts and Science – 2017
- National Academy of Engineering – 2017
- Thomson-Reuters Highly Cited Researcher (top 1%) – 2014, 2015, 2016
- IEEE Communications Society Edwin H. Armstrong Achievement Award “For sustained and fundamental contributions to wireless communications.” – 2014
- IEEE Communications Society Women in Communications Engineering Achievement Award – 2014
- Technical Achievement Award in Communication Theory: IEEE Communications Society – 2013
- Stephen Harris Endowed Chair in Stanford’s School of Engineering – 2012
- Interdigital Innovation Award – 2012
- Silicon Valley Business Journal Women of Influence Award – 2010.
- IEEE Information Theory Society Distinguished Lecturer – 2010-2011

- Technical Achievement Award in Wireless Communications: IEEE Communications Society - 2009
- Tsinghua Distinguished Chair Professorship – 2009-2011
- IEEE Communications Society Distinguished Lecturer – 2007-2008
- Stanford Postdoc Mentoring Award – 2008
- UCSD Shannon Memorial Lecture – 2007
- Stanford Fellow – 2005
- IEEE Fellow – 2005
- Stanford School of Engineering Bredt Faculty Development Scholar – 2003
- National Academy of Engineering Gilbreth Lectureship – 2002
- Alfred P. Sloan Fellowship – 2001
- The Stanford Terman Fellowship – 1999
- Okawa Foundation Award – 1999
- The Office of Naval Research Young Investigator Award 1999
- National Semiconductor Faculty Development Award – 1996, 1997
- The National Science Foundation CAREER Development Award – 1995
- IBM Fellow – 1992-93
- David Griep Memorial Prize for Excellence in Academic Achievement – 1991

Paper Awards:

- IEEE Communications Society Best Tutorial Paper Award (Five-Year Window) – 2013
- IEEE Joint Information Theory Society and Communications Society Best Paper Award (Three-Year Window) – 2004
- IEEE Global Communications Conference, Communication Theory Symposium Best Paper Award – 2013
- Power and Energy Society General Meeting Best Paper Award – 2013
- Asia-Pacific Conference on Signal and Information Processing Best Paper Award – 2012
- IEEE Global Communications Conference Best Paper Award – 2009
- IEEE International Communications Conference, Wireless Communications Symposium Best Paper Award – 2008
- IEEE International Symposium on Information Theory Best Student Paper Award – 2007

Stanford Service and Leadership Roles:

- Chair: National Rising Stars Faculty Job Preparation Workshop for Women Ph.D./Postdocs in EE and CS (2016-2017)
- Provost Search Committee (2016)
- University Budget Group (2010 – present)
- Committee on Research (2015-2017)
- Provost Task Force on Women and Leadership (2014 – present)
- Chair: Faculty Senate (2009-2010)
- Chair: Planning and Policy Board (2009-2010), Member (2009-2013, 2016-2017)
- University Cabinet (2009-2010)
- Faculty Senate (2001-2005, 2006-2010, 2011-2015)
- Senate Steering Committee (2004-2005, 2009-2010)

- Commission on Undergraduate Education (2011-2012)
- Commission on Graduate Education (2005-2006)
- Search Committee for Vice Provost and Dean of Research (2003)
- Freshman Advisor (2001-2002, 2004-2005, 2010-2013, 2015-2016)

Department Service and Leadership Roles:

- Chair: Committee on Student Life (2012-present)
- Chair: Undergraduate Curriculum Committee (2003-2006), Member (2000-2003)
- Faculty Search Committees (2014-2015, 2009-2010)
- Academic Affairs Committee (1999-2004)

Professional Service and Leadership Roles:

- Chair: IEEE Technical Activities Board Committee on Diversity and Inclusion (2017-Present)
- Chair: Women in Technology Leadership Roundtable Metrics Working Group (2016-Present), Roundtable Member (2015-present)
- Chair: IEEE Technical Activities Board Ad Hoc Committee on Women and URM (Nov. 2015-Present)
- Chair: IEEE Bell Medal Committee, 2014 – present (Member 2011 – Present)
- Chair: IEEE Communications Society Emerging Technology Committee, 2012 – 2014
- Member: IEEE Communications Society Strategic Planning Committee, 2012 – 2014
- Member: Marconi Society Award Jury, 2009 – 2011
- President: IEEE Information Theory Society – 2009 (Officer from 2007 – 2011)
- Jury Chair: BBVA Foundation Frontiers of Knowledge Award in Information and Communication Technology, 2009 – 2012
- Chair: IEEE Information Theory Society Claude E. Shannon Award Committee – 2009
- Chair: IEEE Information Theory Society Awards Committee – 2008
- Member: IEEE Technical Activities Board, 2008 – 2009
- Founder and Chair: IEEE Information Theory Society Student Committee, 2005 – 2008
- Board of Governors: IEEE Information Theory Society, 2002 – 2007
- Board of Governors: IEEE Communications Society, 2005 – 2008
- Committee Member: National Research Council Committee on Technology Investment for the Dept. of Homeland Security. 2009 – 2012
- Committee Member: National Research Council Committee on the Trends in Wireless Technology and Policy. August 2003 – 2006
- Committee Member: National Research Council Committee on the Future of Untethered Communication. 1996 – 1997

Multi-University Research Leadership Roles

- Executive Committee and Lead Stanford Principle Investigator: NSF Center for Science of Information. September 2010-present (\$50M program across 11 universities and 26 faculty, 2008 – 2020).
- Lead Principle Investigator: Air Force Office of Sponsored Research, “Reduced

Dimension Wireless Networks and Radio Design: Enabling new Radio Architecture and Network Controllers via Compressed Sensing” (\$2.25M program across 3 universities and 3 faculty, 2012 – 2017)

- Lead Principle Investigator: NSF, “Information Acquisition, State Estimation, and Control in Cyber Physical Systems,” (\$1M program across 3 universities and 3 PIs, 2013 – 2016)
- Lead Principle Investigator: Defense Threat Reduction Agency, “Fundamental Performance Limits in Hybrid Networks under WMD Attack,” (\$1.2M across 2 universities and 2 faculty, 2008 – 2013).
- Lead Principle Investigator: DARPA, “Information Theory of Mobile Ad-Hoc Networks” (\$6M program across 4 universities and 12 faculty, 2006 – 2011)
- Lead Stanford Principle Investigator: Army Research Office, “Dynamic Ad-Hoc Wireless Networks” (\$6M program across 7 universities and 12 faculty, 2006-2010)

Corporate Technical Advisory Boards

- Cohere: 2016-present
- Quantenna (QTNA): 2016-present
- Accenture (ACN): 2014-2016
- Interdigital (IDCC): 2010-present
- Sequans (SQNS): 2006-present
- Aviat Networks (AWNW): 2010-2012

Plenary, Keynote, and Distinguished Lectures:

- IEEE International Workshop on Emerging Technologies for 5G Wireless Cellular Networks, Washington DC, Dec. 2016
- IEEE International Symposium on Wireless Communication Systems, Poznan, Poland, Sept. 2016
- Chinese University of Hong Kong, Shenzhen, China, Aug. 2016
- Technion University Vincent Meyer Colloquium, Haifa, Israel, June 2016
- University of Maryland Advanced Networks Colloquium, College Park, MD, March 2016
- MIT Shannon-Boole Lecture, Cambridge, MA, Feb. 2016
- ACM Symposium on Mobile Ad Hoc Networking, Hangzhou, China, June 2015
- IEEE Personal and Indoor Mobile Radio Conference, Washington DC, September 2014
- IEEE International Symposium on Information Theory, Waikiki, HI, July 2014
- Qualcomm Technology Forum, San Diego, CA June 2014
- European Wireless Conference, Barcelona, Spain, May 2014
- International Zurich Seminar on Communications, Zurich, Switzerland, February 2014
- IEEE International Conference on Communications in China, Xi’an, China, August 2013
- International Conference on Signal Processing and Communications, Kunming, China, 2013
- IEEE Vehicular Technology Conference, Dresden, Germany, June 2013
- IEEE International Workshop on Heterogeneous and Small Cell Networks, Anaheim, CA, December 2012

- Electrical Engineering Distinguished Lecture Series, University of California at Berkeley, Berkeley, CA, November 2012
- IEEE Workshop on Convergence among Heterogeneous Wireless Systems in Future Internet, Ottawa, Canada, June 2012
- IEEE Wireless Communications and Networking Conference, Paris, France, March 2012
- IEEE Global Communications Conference, Miami, FL, December 2010
- IEEE Communications Society Distinguished Lecture Tour in Latin America, Sweden, and Canada, 2009
- IEEE Wireless Communications and Networking Conference, Budapest, Hungary, 2009.
- IEEE International Conference on Computers, Communications, and Networks, San Francisco, CA, August 2009
- IEEE International Symposium on Wireless Pervasive Computing, Santorini, Greece, May 2008
- Conference on Government Microcircuit Applications and Critical Technology, Las Vegas, NV, March 2008
- American Control Conference, Manhattan, NY, July 2007
- IEEE Conference on Information Sciences and Systems, Princeton, NJ, March 2006
- Workshop on Signal Processing for Wireless Communications, King's College, London, May 2006
- International Workshop on Wireless and Ad Hoc Networks, New York, NY, June 2006
- Electrical Engineering Distinguished Lecture Series, University of California at Berkeley, Berkeley, CA, February 2005
- Lillian Gilbreth Lecture, Annual National Academy of Engineering Meeting, Washington. DC, Oct 2002
- National Academy of Engineering Symposium on Frontiers of Engineering, Irvine, CA, March 2002.
- Caltech Ernest J. Watson Lecture Series, Pasadena, CA October 1996

Editorial Activities

- Steering Committee: *IEEE Transactions on Wireless Communications*, 2010 – 2013
- Associate Editor: *IEEE Transactions on Information Theory*, 2007 – 2009
- Editorial Board: *NoW Journal on Foundations and Trends in Communications and Information Theory*, 2006 – present
- Editorial Board: *NoW Journal on Foundations and Trends in Networks*, 2006 – present
- Guest Editor: Special issue of *IEEE Journal on Selected Areas in Communications*, 2007
- Guest Editor-in-Chief: Special issues of *IEEE Wireless Communications Magazine*, 2006
- Guest Editor-in-Chief: Special issues of *IEEE Wireless Communications Magazine*, 2002
- Guest Editor-in-Chief: Special issues of *IEEE Wireless Communications Magazine*, 1998
- Editor: *IEEE Transactions on Communications*, 1995 – 2001
- Editor: *IEEE Wireless Communications Magazine*, 1995 – 2002

Technical Meetings - Leadership Roles

- General Chair: IEEE Wireless Communications and Networking Conference, 2017
- General Chair: IEEE Information Theory Workshop, 2010

- General Chair: Joint Workshop on Coding and Communications, 2008
- General Chair: IEEE Communication Theory Symposium, 2000
- Technical Program Committee Chair: IEEE Information Theory Symposium 2007
- Technical Program Committee Chair: IEEE Communication Theory Workshop 1999

Technical Meetings – Program Committee Member

- IEEE Information Theory Workshop, 2015
- IEEE International Symposium on Information Theory, 2015
- IEEE International Symposium on Information Theory, 2013
- IEEE Communications Theory Workshop, 2012
- IEEE International Symposium on Information Theory, 2012
- IEEE International Symposium on Information Theory, 2010
- IEEE Global Communications Conference, 2004
- IEEE International Conference on Communications, 2002
- IEEE Wireless Personal and Mobile Communications Conference, 2002
- IEEE International Symposium on Signals and Systems, 2000
- IEEE Global Communications Conference, 1999
- IEEE International Communications Conference, 1999
- IEEE Wireless Communications and Networking Conference, 1999
- IEEE Global Communications Conference, 1996
- IEEE Global Communications Conference, 1994

Publication Summary:

Dr. Goldsmith has over 140 journal papers published or in press, two of which have won best paper awards and seven of which are invited papers. She has published 310 peer-reviewed conference papers, four of which have won best paper awards, with an additional thirty four invited. She is the author of three textbooks, one of which has been translated into Chinese, Japanese, and Russian. She has twenty-eight issued patents with two pending. Her publications have been cited over 52,000 times in Google Scholar with an h-index of 84 and she is in the category of “Highest Cited Authors” in Thompson’s ISI citation index by “ranking among the top 1% most cited for their subject field and year of publication”. Links to her publications can be found at the URL:

<http://scholar.google.com/citations?user=cPmMoXoAAAAJ&hl=en&oi=ao>