

## Ramakrishna Janaswamy

### EDUCATION:

Ph.D.: University of Massachusetts, Amherst, Electrical Engineering, 1986.

M.Tech.: Indian Institute of Technology, Kharagpur, India; Electronics & Commun. Engineering, 1983.

B.Tech.: National Institute of Technology, Warangal, India; Electronics & Commun. Engineering, 1981.

### PROFESSIONAL HISTORY:

*2001-Present*: Professor, Department of Electrical & Computer Engineering, University of Massachusetts, Amherst.

*1987-2001*: Professor (July 00), Tenure (July 92), Associate Professor (July 91), Assistant Professor (August 87-June 91), Department of Electrical & Computer Engineering, Naval Postgraduate School, Monterey, California.

*September 1997-June 1998*: Visiting Researcher, Center for PersonKommunikation, Aalborg University, Denmark.

*1986-1987*: Assistant Professor of Electrical Engineering, School of Engineering & Physical Sciences, Wilkes University, Wilkes-Barre, Pennsylvania.

Summers 1994, 1995: *NASA Ames Research Center*, Moffett Field, *SPAWARSYSCEN*, San Diego, CA.

### HONORS & AWARDS:

*Distinguished Alumni Professional Achievement Award*, National Institute of Technology, Warangal, India, 2017; *College of Engineering Outstanding Teacher Award*, 2014; *Distinguished Foreign Scientist Award*, Council of Scientific and Industrial Research, India 2013; *Fellow of IEEE*, January 2003; Recipient of *IEEE Third Millennium Medal*, January 2000; 1995 *IEEE Transactions on Antennas & Propagation R.W.P. King Best Paper Award*; Associate Editor for *IEEE Transactions on Antennas & Propagation*, *IEEE Transactions on Vehicular Technology*, *Radio Science*, *IET Electronics Letter*; Editor, *Inst. Electro. Telecom. Engrs. Tech. Reviews*, India.

### RESEARCH SPONSORS:

Bureau of Ocean and Energy Management, Army Research Office; National Science Foundation; Office of Naval Research; Air Force Research Labs; SPAWARSYSCEN, San Diego; Naval Security Group Command; US Army CECOM; Naval Weapons Center.

### PUBLICATIONS:

#### Book:

R. Janaswamy, *Radiowave Propagation and Smart Antennas for Wireless Communications*, Boston: Kluwer Academic Publishers, pp. 312, November 2000.

#### Book Chapters:

R. Janaswamy, Signal Fading in Radio Communications, *Encyclopedia of RF & Microwave Engineering*, Vol. 5, K. Chang, Ed., Wiley-Interscience, 2005.

R. Janaswamy, Spatial Diversity in Wireless Communications, *Handbook of Antennas in Wireless Communications*, L. Godara, Ed., CRC Press, August 2001.

**Journal Publications:**

Over 50 peer-reviewed articles (many as single author) in several journals including *IEEE Transactions on Antennas & Propagation*; *IEEE Transactions on Wireless Communications*; *IEEE Transactions on Vehicular Technology*; *IEEE Transactions on Microwave Theory & Techniques*; *IEEE Antennas & Wireless Propagation Letters*; *Radio Science*; *Microwave & Optical Technology Letters*; *Wireless Personal Communications*; Elsevier *Ad Hoc Networks*; *Journal of Physics A: Theoretical & Mathematical*; *Journal of Mathematical Physics*.

**TEACHING ACTIVITIES:**

*GRADUATE COURSES TAUGHT:* Nonlinear Dynamics and Engineering Applications (*course developed*), Modern Methods in EM Analysis (*course developed*), Linear Systems Theory, Microwave and RF Design of Wireless Systems, Wireless Propagation and Smart Antennas (*course developed*), Electromagnetic Theory, Introduction to Radar Systems, Antenna Theory and Design, Communications Engineering, Fiber Optic System Fundamentals, Optoelectronic Engineering, Microwave Active Devices, Advanced Methods for Remote Sensing and Propagation (*course developed*).

*UNDERGRADUATE COURSES TAUGHT:* Microwave Engineering II, Probabilistic Analysis of Signals and Systems, Fourier Analysis of Signals and Systems, Analog and Digital Communication Systems, Circuit Analysis-I, Introduction to MATLAB, Introduction to Fields and Waves, Microwaves & Antenna Systems, Microwave & Communications Lab, Fiber Optic Communications.

*Nominated* for UMass Amherst Distinguished Teaching Award, 2011

**Professional Short Course Offerings:**

*Wireless Propagation & Smart Antennas*, IEEE AP-S International Symposium/URSI Meeting, San Antonio, June 2002, Boston, July 2001, Sprint Corporation, Overland Park, Kansas, October 2003, 2004; *Array Antennas for Wireless Communications*, IEEE Phased Array Systems and Technology Conference, Dana Point, California, May 2000; *Radiowave Propagation and Adaptive Antennas*, Swedish Defense College, Stockholm, Sweden, March 1999, March 2001.

**ADMINISTRATIVE SERVICE AT UMass, Amherst:**

- **Department Representative to the College Personnel Committee, CPC** (2006-2009, July 2010-2012); **Chair** 2008-2009, 2010-2012
- **Chair, AdHoc CoE Dean Search Committee, Summer 2011, Spring 2012**
- **CPC Representative to the CoE Dean's Evaluation Committee** (Spring 2008)
- **Graduate Program Director** (2005-2008)
- **Member of Graduate Council and the Academic Standards Subcommittee** (2005-2008), (2017-2020)
- **Executive Board Member, Massachusetts Society of Professors** (2004-2006)

**Reviewed Research Proposals** for U.S. Army Research Office, National Science Foundation, Idaho Board of Education, Kansas NSF EPSCoR, South Carolina DoD EPSCoR, ASEE/Michigan State University, US Civilian Research and Development Foundation, NSF US-Egypt Science & Technology Joint Fund Program, Innovation and Technology Support Program, Hong Kong SAR Government

**Technical Consultant:** Westfield Gas & Electric, Westfield, MA, Newlans, Inc., Chelmsford, MA, Octoscope, MA, Motorola Corp., Schaumburg, IL, Comcast Cable Communications, Inc., PA, Ball

Corporation, Boulder, CO, TRW Corporation, Los Angeles, CA, Northrop Corporation, Chicago, IL, Ericsson, Copenhagen, Denmark, CSELT, Italy, American Radio Relay League, Washington DC, Ministry of Defense, Singapore, Sprint PCS, Overland Park, Kansas