

**Dr. Ravi Sankar** is a *Theodore and Venette Askounes-Ashford Distinguished Scholar* and [U.S. Fulbright Scholar](#) Awards winning Professor of Electrical Engineering and has been with USF since 1985. He is responsible for establishing and leading the [Interdisciplinary Communications, Networking and Signal Processing \(iCONS\) Research](#) group and the Interdisciplinary Center of Excellence in Telemedicine (*ICE-T*). He is also the supervisor of the [Communications and Signal Processing graduate program](#) track and a member of the Biomedical Engineering program. His educational background includes the B. E. (Honors) degree in Electronics and Communication Engineering from the University of Madras, India, M. Eng. degree in Electrical Engineering from Concordia University, and Ph. D. degree in Electrical Engineering from the [Pennsylvania State University](#).

### **Research Interests:**

His main research interests are in the multidisciplinary areas of wireless communications, networking, signal processing and its applications. In particular, in the communications and networking area, his research interests are on the resource and mobility managements of wireless cellular, ad-hoc, and sensor networks, energy-efficient protocol design and cross-layer optimization. In the signal processing area, the emphasis is on all aspects of processing from feature extraction, coding, and recognition to machine learning applied to speech, biomedical and other signals and in integrating intelligent techniques including the use of neural networks and fuzzy logic in the simulation, modeling, and design of high performance and robust systems. His current focus is on the use of wearable sensors and technologies for advancing health care.

### **Accomplishments in a Nutshell:**

Prof. Sankar and his collaborators have published highly cited papers in these research topics with *more than 210 papers* in peer-refereed journals and premier international conferences. He has also contributed to several book chapters. iCONS research group under his leadership has conducted successfully numerous research (over 30 externally funded projects) over the years with the support from federal agencies (NASA, DoD, U.S. Army, NSF) and state agencies (Florida High Tech Council), and partnerships of several industries including Honeywell, Motorola, Raytheon, AT&T, Texas Instruments, Johnson & Johnson, Group Technologies, STS International. He has supervised over 8 post-doctoral research, ~65 Ph.D. dissertations, M.S. theses/projects, and ~20 B.S. senior design projects to completion. He is currently directing a number of Ph.D. students. Dr. Sankar is an approved mentor of the *Alfred P. Sloan Foundation's Minority Ph.D. Program (NACME)* and *Louis Stokes Alliance for Minority Participation Program (LSAMP)* at USF.

Dr. Sankar was a *Fulbright Fellow* in 2015-16 and received the USF Theodore and Venette Askounes-Ashford *Distinguished Scholar Award* in 2007. He was the National Science Foundation (NSF) nominated short-term *Invited Research Fellow* of the Japanese Society for Promotion of Science (JSPS) in 2000 to conduct collaborative research in Japan. He was with Shinshu University, Japan and University of Melbourne, Australia during spring and summer 2000. His work experience includes being a research staff at the US Air Force Research Lab in summer 1997 and

at Motorola in summer 1991. He was also the recipient of the *IEEE Florida Council Outstanding Engineering Educator* award in 1996 and the *Outstanding Contributions in Research* award in 1997 from the ASEE. He is a senior member of [IEEE](#), member of [ACM](#) and [ASEE](#), and a registered Professional Engineer in the State of Florida. He is also a member of several IEEE societies including Communications, Computer, Signal Processing, Circuits and Systems, and Engineering in Medicine and Biology. He was a *Distinguished Lecturer* for the IEEE Engineering in Medicine and Biology Society (EMBS) from 2014-16.

Dr. Sankar was an Associate Editor of the *IEEE Communications Surveys and Tutorials* (2003-09), the *International Journal of Control, Automation, and Systems* (2008-13), and a guest editor for the *IEEE Transaction on Information Technology in Biomedicine* (2002-03). He currently serving on the editorial board of *Journal of Electrical and Computer Engineering*, and also an *Honorary Editorial Board* member of *Cancer Informatics*. He has delivered more than 50 keynote speeches and invited talks internationally at numerous conferences and universities in US, **South Korea, Japan**, India, Brazil, Argentina, and Mexico. He was the Organizer and Co-Chair of the *US-Korea Joint International Workshop on Global Wireless Sensor Networks* (GWSN 2009), sponsored by NSF and KOSEF (Korea Science and Engineering Foundation) in 2009 and the *2nd US-Korea Joint International Workshop* in 2011. He was also the organizer and executive program chair of *The Ninth Annual Wireless Telecommunications Symposium*, 2010. He has served on the organizing committees, technical program committees, and as a session organizer and chair for many IEEE conferences including Globecom, International Conf. on Communications (ICC), Southeastcon, Local Computer Networks (LCN), Wireless Communications and Networking Conference (WCNC), in the areas of communications and signal processing. Dr. Sankar was the *Chair and Founding Officer* of the EMBS chapter of the IEEE Florida west coast section from 2007-11. He was the *Technical Program Chair* for *IEEE Southeastcon* and the Vice-Chair for *IEEE Signal Processing Society* chapter in 1996.

**Related Links:**

**iCONS Research Group:** <http://icons.eng.usf.edu>