

## Dr. Jeffrey H. Reed



Dr. Jeffrey H. Reed is the Willis G. Worcester Professor in the Bradley Department of Electrical and Computer Engineering at Virginia Tech. He currently serves as Founding Director of *Wireless@Virginia Tech*, one of the largest and most comprehensive university wireless research groups in the US which he founded in 2006 and served as its first director. In 2010, he founded the Ted and Karyn Hume Center for National Security and Technology and served as its Interim Director.

Dr. Reed's area of expertise is in software radios, smart antennas, wireless networks and communications signal processing. He has authored, co-authored, or co-edited ten books and proceedings, contributed to six books, and authored or co-authored over 350 journal and conference papers. His book on Software Defined Radio is considered one of the earliest and most comprehensive books on the subject. In September 2014 his book on Cellular Networks was published by Wiley and IEEE Press and is a comprehensive review of wireless communication fundamentals and cellular network operations.

Dr. Reed has had numerous commercial research sponsors including Samsung, Motorola, LG, TI, GM, and Intel; government sponsors including: DARPA, ONR, ARO, JIEDDO, DOJ, and Customs Dept; and government contractors including ITT, SAIC, General Dynamics, Aerospace, IDA, and Raytheon. He is currently the principle investigator on an NSF project to examine enforcement and regulatory technologies for spectrum sharing between commercial wireless and government users. Dr. Reed has had been PI or co-PI on over 100 different sponsored research contracts.

In addition to being a co-founder of Federated Wireless, Dr. Reed is co-founder of Cognitive Radio Technologies (CRT), a company that is commercializing of the cognitive radio technologies produced for military applications, and for PFP Cybersecurity, a company that specializes in security for embedded systems, including Android platforms. He co-founded these companies with his former PhD students. He has also served as a consultant for approximately 30 organizations, covering topics such as merger evaluation, network neutrality, and band planning. Dr. Reed served on the President's Council of Advisors in Science and Technology (PCAST) Advisory Group on how to transition federal spectrum for commercial economic benefits. In 2014, Dr. Reed was selected to be a member of CSMAC, the advisory group on spectrum issues for the US Department of Commerce.

In 2004, Dr. Reed received the Outstanding Industry Contributor Award from the SDR Forum. During 2004 he also received an award from the SDR Forum for his pioneering 2001 publication that provides a mathematical foundation to cognitive radio based on game theory. In 2005, Dr. Reed became *Fellow to the IEEE* for contributions to software radio and communications signal processing and for leadership in engineering education. He serves as a Distinguished Lecturer for the IEEE Vehicular Technology Society and is currently on the Editorial Board for the Proceedings of the IEEE. In 2013, he received the International Achievement Award from the Wireless Innovations forum for the impact of his accumulated research. In 2014, Dr. Reed served as co-general chair for the IEEE Dynamic Spectrum Access Network (DySPAN) conference.