## BIOGRAPHY

Dr. Charles Clancy is a professor in the Bradley Department of Electrical and Computer Engineering at Virginia Tech, and is Director of the Ted and Karyn Hume Center for National Security and Technology. With over 70 faculty and staff, the Hume Center leverages $10M to $15M in annual grants and contracts to engage 350 students in research and experiental learning focused in national security and technology. Additionally, Dr. Clancy leads efforts in developing and expanding the university's role in cybersecurity research and education. Dr. Clancy is an internationally-recognized expert on the security of wireless and cellular networks, and has testified to Congress on cybersecurity issues.

Prior to joining Virginia Tech in 2010, Dr. Clancy spent seven years working for the US Department of Defense in a variety of research, engineering, and operations roles. The majority of his time was spent as a researcher with the Laboratory for Telecommunications Sciences, a federal research laboratory at the University of Maryland. There he led government research programs in wireless communications, with an emphasis on software-defined and cognitive radio. His research focused on efficient use of commodity processors for software-defined radio, and security implications involved in military use of cognitive radio technologies. During this time, Dr. Clancy was also heavily involved in wireless authentication and authorization protocol standardization, and held leadership positions within the Internet Engineering Task Force.

Dr. Clancy received his BS in Computer Engineering from the Rose-Hulman Institute of Technology in 2001, his MS in Electrical Engineering from the University of Illinois, Urbana-Champaign in 2002, and his PhD in Computer Science from the University of Maryland, College Park, in 2006. His studies focused on information-theoretic foundations of communications and security.

An avid entrepreneur, Dr. Clancy is co-founder of a number of companies, including HawkEye 360, focused on commercial space-based RF sensing; Federated Wireless, focused on next-generation wireless and spectrum sharing; Optio Labs, focused in mobile security; and Stochastic Research, a technical consulting firm. Additionally he serves as a founding advisor to DeepSig, a company focused on the intersection of machine learning and signal processing. These companies have collectively raised over $120M in venture capital.

Dr. Clancy is a Senior Member of the Institute for Electronics and Electrical Engineers (IEEE) and holds leadership positions within IEEE's Communications and Signal Processing Societies. He has previously served as an editor for *IEEE Transactions on Cognitive Communications and Networking* and *IEEE Transactions on Information Forensics and Security*. In 2015, Dr. Clancy was elected to be a member of the prestigious AFCEA Intelligence Committee.

Dr. Clancy is co-author to over 200 peer-reviewed technical publications in academic conferences and journals and over 20 patents. His books include *MIMO Radar Waveform Design for Spectrum Sharing with Cellular Systems* (Springer 2016), *Cellular Communications Systems in Congested Environments* (Springer 2017), *Spectrum Sharing between Radars and Communication Systems* (Springer 2017), and *Resource Allocation with Carrier Aggregation in Cellular Networks* (Springer 2018).