

Steven W. McLaughlin



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Biography, Education, and Research Interests:

Steven W. McLaughlin received the B.S.E.E. degree from Northwestern University, the M.S.E. degree from Princeton University, and the Ph.D. degree from the University of Michigan. He joined the School of Electrical and Computer Engineering at Georgia Tech in September 1996 where is now Steve W. Chaddick School Chair for the School of Electrical and Computer Engineering.

From 2007-2012 he was Vice Provost for International Initiatives and Steven A. Denning Chair in Global Engagement. As Vice Provost he was responsible for Georgia Tech's global engagement in research, education, and economic development. He was also President of GT Global, Inc. a not-for-profit corporation created to manage select Georgia Tech international initiatives.

In 2011 he was awarded the honor Chevalier dans l'Ordre Nationale de Merite, (Knight of the French National Order of Merit), the second highest civilian award given by Republic of France. He was the first Georgia Tech recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE) where he was cited by President Clinton "for leadership in the development of high-capacity, nonbinary optical recording formats." He also received the National Science Foundation CAREER and the Information Storage Industries Consortium Technical Achievement Award (with Dr. David Warland at UC-Davis) for this work. From 1999-2003 he was the Principal Scientist for Calimetrics where this work was commercialized (Calimetrics was acquired by LSI Logic in 2005). He received the Friend of the Graduate Student Award in 2002 from the GT Graduate Student Association and the 2009 Faculty Achievement Award from the School of ECE. He was also a co-recipient of the IEEE Communication Society & Information Theory Society Joint Paper Award (2011).

He is a co-founder of [Whisper Communications](#), a physical-layer security company

established in 2009 to commercialize technologies developed in his research group. He was previously Deputy Director of [Georgia Tech - Lorraine](#) - the European Campus of the Georgia Institute of Technology - in Metz, France from 2006-2007. He was a Ken Byers Professor from 2000-2012 and President of the IEEE Information Theory Society in 2005. He has held positions at Booz, Allen and Hamilton, AT&T Bell Labs, and Eastman Kodak. From 1992-1996 he was on the Electrical Engineering faculty at the Rochester Institute of Technology.

His research interests are in the general area of communications and information theory. His research group has published in the areas of coding and signal processing for wireless communications and data storage channels; privacy and data security, physical layer security, forward error correction and equalization for optical networks; quantum key distribution, wireless and RFID security; and inference in social media networks. He has published more than 250 papers in journals and conferences and holds 36 US patents. He has served as the research and thesis advisor to more than 50 students at the bachelors, masters, doctoral and post-doctoral levels.

He served as the President of the IEEE Information Theory Society in 2005, is a Fellow of the IEEE and served as an Associate Editor for Coding Techniques for the IEEE Transaction on Information Theory. He also served as the Publications Editor for that journal from 1995-1999. He co-edited (with Sergio Verdu) Information Theory: 50 Years of Discovery (Wiley/IEEE Press, 1999).