

ECE Seminar Series

Speaker: Prof. Moe Win, MIT

Time and Location: Mondar Mar. 25 at 2pm in LSC 213-5

Title: Network Localization and Navigation

Abstract: The availability of positional information is of extreme importance in numerous commercial, health-care, public safety, and military applications. The coming years will see the emergence of location-aware networks with sub-meter localization accuracy, minimal infrastructure, and robustness in harsh (GPS challenged) environments. To reach this goal we advocate network localization and navigation, a new paradigm that exploits a combination of wideband transmission and spatiotemporal cooperation. In particular, our work has addressed this problem from three perspectives: theoretical framework, cooperative algorithms, and network experimentation. We will give a brief technical overview of our research results in this exciting field.

Bio: Moe Win is a Professor at the Massachusetts Institute of Technology (MIT). Prior to joining MIT, he was at AT&T Research Laboratories for five years and at the Jet Propulsion Laboratory for seven years. His research encompasses fundamental theories, algorithm design, and experimentation for a broad range of real-world problems. His current research topics include network localization and navigation, network interference exploitation, intrinsic wireless network secrecy, adaptive diversity techniques, and ultra-wide bandwidth systems.

Professor Win is a Fellow of the AAAS, the IEEE, and the IET, and was an IEEE Distinguished Lecturer. He is an elected Member-at-Large on the IEEE Communications Society Board of Governors (2011–2013). He was the Chair (2004–2006) and Secretary (2002–2004) for the Radio Communications Committee of the IEEE Communications Society. He was honored with two IEEE Technical Field Awards: the IEEE Kiyo Tomiyasu Award and the IEEE Eric E. Sumner Award (jointly with Professor R. A. Scholtz). He received the Copernicus Fellowship, the Royal Academy of Engineering Distinguished Visiting Fellowship, the Fulbright Fellowship, the Laurea Honoris Causa from the University of Ferrara, and the U.S. Presidential Early Career Award for Scientists and Engineers.