



Graduate Seminar (EEL 6936)
Department of Electrical Engineering
http://ee.eng.usf.edu/Grad_Seminar

Dr. Alfred Hero

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Monday, November 28, 2016, 2:00 p.m. - 3:00 p.m.
Engineering Building II (ENB) Room 109

Towards a Science of Complex Data

Abstract

We are seeing an emergence of a unified science of data for scientific discovery, social good, and commerce. Data science is at the nexus of thriving communities in mathematics, engineering, statistics, information science, physics, and computer science. This talk will provide perspectives on how data science may have profound effects on personalized health, transportation, social sciences, and education. The talk will then turn to foundational principles and algorithms of data science that can be used to draw inferences from complex data.



Biography

Alfred O. Hero III received the B.S. (summa cum laude) from Boston University (1980) and the Ph.D from Princeton University (1984), both in Electrical Engineering. Since 1984 he has been with the University of Michigan, Ann Arbor, where he is the John H. Holland Distinguished University Professor of Electrical Engineering and Computer Science and the R. Jamison and Betty Williams Professor of Engineering. He is also the Co-Director of the University's Michigan Institute for Data Science (MIDAS) . His primary appointment is in the Department of Electrical Engineering and Computer Science and he also has appointments, by courtesy, in the Department of Biomedical Engineering and the Department of Statistics. From 2008-2013 he held the Digeito Chaire d'Excellence at the Ecole Superieure d'Electricite, Gif-sur-Yvette, France. He is a Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and several of his research articles have received best paper awards. Alfred Hero was awarded the University of Michigan Distinguished Faculty Achievement Award (2011). He received the IEEE Signal Processing Society Meritorious Service Award (1998), the IEEE Third Millenium Medal (2000), and the IEEE Signal Processing Society Technical Achievement Award (2014). In 2015 he received the Society Award, which is the highest career award bestowed by the IEEE Signal Processing Society. Alfred Hero was President of the IEEE Signal Processing Society (2006-2008) and was on the Board of Directors of the IEEE (2009-2011) where he served as Director of Division IX (Signals and Applications). He served on the IEEE TAB Nominations and Appointments Committee (2012-2014). Alfred Hero is currently a member of the Big Data Special Interest Group (SIG) of the IEEE Signal Processing Society. Since 2011 he has been a member of the Committee on Applied and Theoretical Statistics (CATS) of the US National Academies of Science. Alfred Hero's recent research interests are in the data science of high dimensional spatio-temporal data, statistical signal processing, and machine learning. Of particular interest are applications to networks, including social networks, multi-modal sensing and tracking, database indexing and retrieval, imaging, biomedical signal processing, and biomolecular signal processing.