The Long Island (LI) Chapter of IEEE Signal Processing Society (SPS) presents the following Distinguished Lecture:

Distributed Learning and Signal Processing Algorithms

Tuesday May 26th 2020 at 5:30 PM Eastern Standard Time (EST)

Abstract:

Artificial intelligence (AI) today is about developing the capability of a single node to make an inference or to respond to its surroundings with the appropriate action. Inevitably, autonomous systems will evolve to operate in cooperation, as intelligent swarms. This talk will introduce peer to peer algorithms for distributed computation and inference. We will start from the Average Consensus (AC) primitive, its convergence properties over deterministic and random networks and then introduce the Distributed Sub-Gradient (DSG) and the Alternating Direction Method of Multipliers (ADMM) methods. The applications of these algorithms to distributed computation tasks such as hypothesis testing, linear regression, least square approximations, principal component analysis and dictionary learning will be highlighted throughout the talk.

Distinguished Lecturer:

Dr. Anna Scaglione (M.Sc.'95, Ph.D. '99) is currently a professor in electrical and computer engineering at Arizona State University. She was Professor of Electrical Engineering previously at the at UC Davis (2010-2014), Associate

Her expertise is in the broad area of statistical signal processing for communication, electric power systems and networks. Her current research focuses on studying and enabling decentralized learning and signal processing in networks of sensors.

Dr. Scaglione was elected an IEEE fellow in 2011. She served as Associate Editor for the IEEE Transactions on Wireless Communications and on Signal Processing, as EiC of the IEEE Signal Processing letters. She was member of the Signal Processing Society Board of Governors from 2011 to 2014. She received the 2000 IEEE Signal Processing Transactions Best Paper Award and more recently was honored for the 2013, IEEE Donald G. Fink Prize Paper Award for the best review paper in that year in the IEEE publications, her work with her student earned 2013 IEEE Signal Processing Society Young Author Best Paper Award (Lin Li).

When: Tuesday May 26th 2020 @ 5:30 pm to 7:00 pm EST

Where: Zoom Virtual Meeting

Registration:
https://events.vtools.ieee.org/m/230240

Admission:
Free for all registration participants max 300.

Distinguished Lecture Coordinators:

Mr. Mesecher, Vice Chair, SPS, IEEE LI Section (signal@ieee.li)

Dr. Donaldson, Chair, SPS, IEEE LI Section (signal@ieee.li)