MSCS ⚜ MESS

Happy AAPI Heritage Month!

This week's issue features influential Asian-American and Pacific Islander-American mathematicians, statisticians, and computer scientists of the past and present. Also read further on for details on events happening today and next week!

Ajay Bhatt

Ajay Bhatt, an Indian-American computer scientist who has worked at Intel for over 30 years, is a co-inventor of USB technology. In the 1990s, physically linking devices to each other was very cumbersome. Bhatt and his collaborators devised a simpler approach and, in doing so, created a new industry standard. USB technology is of course still used today, and has made Intel a *lot* of money over the years. Bhatt now works as Chief Client Platform Architect at Intel. (Source: CNN.)

Aparna Higgins

Aparna Higgins is a professor of mathematics at the University of Dayton. Raised in India, she earned her PhD at the University of Notre Dame and has been teaching at Dayton since 1984. Her area of research is graph theory; she also conducts workshops nationally with math faculty on involving undergraduate students in research. Higgins has also served in various capacities within the Mathematical Association of America. (Source: University of Dayton.)

Wei Pan

Wei Pan is a professor of biostatistics at the University of Minnesota. He was raised in China but moved to the United States for his graduate education, and earned a PhD in statistics from the University of Wisconsin-Madison. His research focuses on statistical genetics and genomics, and recently Pan has been developing statistical and computational tools for analyzing genetic mutations. (Source: University of Minnesota and Pan's CV.)
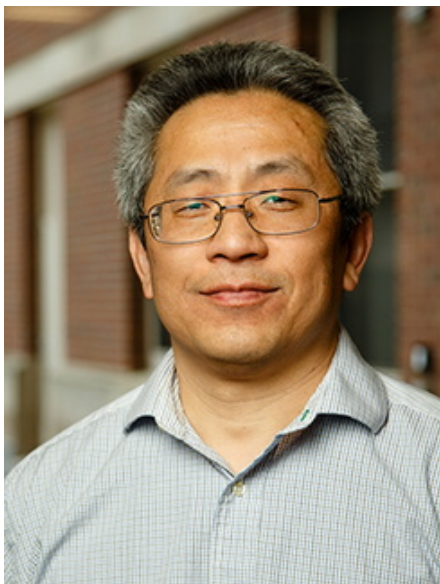
Today's Research Seminar

Title:	Molecular "Shapes" of Ovarian Cancer
Speaker:	Chen Wang
Date:	**Friday, May 13**
Time:	3:30pm
Location:	RNS 204

About the talk: With the growing amount of molecular data (e.g. transcriptomics) for human disease research, data science plays an increasingly important role to enable novel discoveries for a better understanding of biological mechanisms and to transform clinical considerations for individualized treatment. In this talk, the speaker will go through one of his major research areas to decipher and understand the molecular heterogeneity of ovarian cancer. The speaker will use Mapper, a technique from topological data analysis (TDA), as a focused computational example for reducing data dimensionality and mining data relationships. Through the development of a semi-supervised topological analysis (STA) framework, the speaker will illustrate how topology shapes of tumor molecular data could shed insights into disease heterogeneities in relation to patients' prognoses.

About the speaker: Dr. Chen Wang had his B.S. and M.S. degrees in Electrical Engineering, from the University of Science and Technology of China. After obtaining his Ph.D. in Electrical Engineering at Virginia Tech, Dr. Wang joined Mayo Clinic in 2011 as a Research Associate in the Department of Health Sciences Research. He was appointed in 2015 as Assistant Professor of Biomedical Informatics, and currently holds the academic rank of Associate Professor of Biomedical Informatics since 2018. Dr. Wang has long-term research commitments to advancing cancer research through machine-learning and translational omics approaches. He has been actively working with The Cancer Genome Atlas (TCGA) projects since 2012 and serves as the corresponding author of the pan-cancer study of DNA Damage Repair, which has been chosen among the best papers of the 2018 Cell Reports.