CS Departmental Seminar Series
Tuesday, September 11, 2018, EC 205 at 3:30p.m. – 4:30p.m.

Title: High Performance Computing, Computational Science, and Data Science

The increasingly important data-intensive scientific discovery presents a critical question to the high performance computing (HPC) community - how to efficiently support these growing scientific big data applications with HPC systems that are traditionally designed for big compute applications? The conventional HPC systems are computing-centric and designed for computation-intensive applications. Scientific big data applications have different characteristics compared to big compute applications. These scientific applications, however, will still largely rely on HPC systems to be solved. In this talk, we discuss general HPC trend and some of our R&D in this space including HPC system architectures, data analytics methodologies and optimizations. We will offer a tour to computing and data center facility at High Performance Computing Center on campus for those who are interested after this talk.

Dr. Yong Chen is an Associate Professor and Director of the Data-Intensive Scalable Computing Laboratory in the Computer Science Department of Texas Tech University. He is also the Site Director of the Cloud and Autonomic Computing center at Texas Tech. His research focuses on data-intensive computing, parallel and distributed computing, high-performance computing, cloud computing, and computer systems in general. He has published over 100 research papers in international journals and conferences. His research has been funded by the National Science Foundation, Department of Defense, Department of Energy/Argonne National Laboratory, Oak Ridge Associated University, Dell Inc., Nimboxx, Jabil/Stack Velocity, and NVidia. He has also served as editors, chairs, and program committee members for numerous international journals, conferences, and workshops. He received several awards for his research and teaching activities including Texas Tech University Mortar Board and Omicron Delta Kappa Outstanding Faculty Award, Texas Tech University Whitacre College of Engineering Research Award, IEEE TCSC (Technical Committee on Scalable Computing) Young Achievers Award, the Ralph E. Powe Junior Faculty Enhancement Award, ACM/IEEE Outstanding High Performance Computing Ph.D. Fellowship, several Best Paper Awards and Best Paper finalist and Best Student Paper finalist at the ACM/IEEE Supercomputing Conference (SC). More information about him can be found at http://www.myweb.ttu.edu/yonchen/and https://discl.cs.ttu.edu