

『Tsinghua Information Forum #109 —NEC #8』



- **Title:** Distributed Frameworks for Iterative Computations on Massive Datasets
- **Speaker :** Lixin Gao
University of Massachusetts - Amherst
- **Time:** June 17, 10:00—11:30am
- **Venue:** 1-515 FIT Building, Tsinghua

Abstract :

The advances in sensing, storage, and networking technology have created huge collections of high-volume, high-dimensional data. Making sense of these data is critical for companies and organizations to make better business decisions, and even brings convenience to our daily life. Recent advances in data mining, machine learning, and applied statistics have led to a flurry of data analytic techniques that typically require an iterative refinement process. However, the massive amount of data involved and potentially numerous iterations required make performing data analytics in a timely manner challenging. In this talk, we present a series of distributed frameworks that enable fast iterative computations. By providing the support of iterative computations and asynchronous prioritized execution, we can ensure fast convergence of the iterative process.

Biography :

Lixin Gao is a professor of Electrical and Computer Engineering at the University of Massachusetts at Amherst. She received her Ph.D. degree in computer science from the University of Massachusetts at Amherst. Her research interests include social networks, and Internet routing, network virtualization and cloud computing. Between May 1999 and January 2000, she was a visiting researcher at AT&T Research Labs and DIMACS. She was an Alfred P. Sloan Fellow between 2003-2005 and received an NSF CAREER Award in 1999. She won the best paper award from IEEE INFOCOM 2010, and the test-of-time award in ACM SIGMETRICS 2010. Her paper in ACM Cloud Computing 2011 was honored with “Paper of Distinction”. She received the Chancellor’s Award for Outstanding Accomplishment in Research and Creative Activity in 2010, and is a fellow of IEEE and ACM.

Organizer: SIST

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