



A Knights Welcome To: Dr. Yanjie Fu



Date: Wednesday January 30, 2019

Time: 10:30am-11:30am

Location: HEC-356

(Harris Engineering Building)

Bio: Dr. Yanjie Fu received his Ph.D. degree from Rutgers University in 2016, the B.E. degree in Computer Science from University of Science and Technology of China in 2008, and the M.E. degree in Computer Engineering from Chinese Academy of Sciences in 2011. He is currently an Assistant Professor at Missouri S&T (University of Missouri-Rolla).

His general interests include data mining and big data analytics. His recent research focuses are spatial-temporal-networked data mining, collective, dynamic, and structured machine learning, with applications to big data problems, including smart cities, intelligent transportations, user and system behavior analysis, recommender systems, power grids, disaster and emergency management. He has research experience in industry research labs, such as IBM Thomas J. Watson Research Center and Microsoft Research Asia. He has published prolifically in refereed journals and conference proceedings, such as IEEE Transactions on KDE, ACM Transactions on KDD, IEEE Transactions on MC, ACM Transactions on IST, SIGKDD Conference, AAAI Conference, IJCAI Conference.

“Learning from Spatial-Temporal-Networked Data: Dynamics Modeling, Representation Learning, and Applications”

The pervasiveness of mobile, IoT, and sensing technologies have connected humans, physical worlds, and cyber worlds into a grand human-social-technological system. This system consists of user and systems that interact with each other in real time and at different locations. Therefore, big spatial-temporal-networked behavioral data have been accumulated from mobile devices and App services.

In this talk, I will first introduce what are spatial-temporal-networked data and why it is difficult to make sense of spatial-temporal-networked data. Then, I will focus the modeling, representation, and applications of spatial-temporal-networked data, including (1) modeling spatial-temporal-networked dynamics; (2) learning deep representations of spatial-temporal-networked behaviors; (3) their applications to smart route recommendations and user behavior profiling. Also, I will discuss how these techniques can interact with user-centric education. Finally, I will conclude the talk and present the big picture on developing close-looped intelligent and trustworthy data science systems.

