NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

C S   S E M I N A R

Title: **Recent Advances of Research at Huawei Noah's Ark Lab**

Speaker: Mr. Baofeng Zhang, Dr. Zhengdong Lu, and Dr. Ruiming Tang
             Huawei Noah's Ark Lab

Date/Time: 11 November 2015, Wednesday, 02:00 PM to 04:15 PM

Venue: Video Conference Room, COM1-02-13

Chaired by: Dr Ng Hwee Tou, Provost's Chair Professor, School of Computing
             (nght@comp.nus.edu.sg)

Abstract:

The Noah's Ark Lab is a research lab of Huawei Technologies, located in Hong Kong and Shenzhen. The mission of the lab is to make significant contributions to both the company and society by innovating in data mining, artificial intelligence, and related fields. Founded in 2012, the lab has now grown to be a research organization with many significant achievements in both academia and industry. In this talk, three speakers will introduce some of the achievements in research made by the lab recently.

First, Baofeng Zhang will give a high level introduction to the research projects at Noah's Ark Lab. He will then focus on the technologies developed for building smart cities by leveraging big data in telecommunication industries. He will talk about the challenges and opportunities in telco big data analytics, and explain some of the progresses made by the lab, including technologies for network maintenance, customer relationship management, and network security enhancement.

Next, Ruiming Tang will talk about recommendation at Huawei AppStore. A recommendation engine with the most advanced technologies in the industry has been developed by the lab and is being deployed at Huawei AppStore. The recommendation engine, equipped with large scale machine learning technologies, can precisely under users' interest and provide very high accuracy recommendation.

Finally, Zhengdong Lu will introduce the research on deep learning for natural language processing conducted at the lab, with focus on machine translation and natural language dialogue. He will first give a brief overview on several threads of work on the topic, followed by a detailed discussion on recent work on memory-based neural machine translation, neural network-based reasoning, and neural generative question-answering.

Agenda:
14:00-14:40 Big Data Analytics for Telco Industry - Mr. Baofeng Zhang (Vice Director of Lab);
14:40-15:20 Recommendation at Huawei AppStore - Dr. Ruiming Tang (Researcher);
15:20-16:00 Deep Learning for Natural Language Processing - Dr. Zhengdong Lu (Senior Researcher);
16:00-16:15 Q&A

Biodata:

Mr. Baofeng (Felix) Zhang
Vice Director of Huawei Noah's Ark Lab
Baofeng Zhang is founder and co-leader of Noah's Ark Lab at Huawei. He has more than 16 years experiences in Telco industry, about 8 years research management background in IT areas. Rich experiences with R&D activities and management (e.g., software design and development, requirement analysis, system architecture design, standard and research) and also joined and led a wide range of research/development projects (e.g. campus calling debit card in circuit-based switch, Intelligent LAN switch/Edge Routers, Telco Big Data and Intelligence Bank ...)
He is also very active in society, head of delegations to numerous national standard development events and active participant of numerous of international Standard Development e.g. ITU-T and ETSI, member of core expert group in National "Important Special Projects of Crucial Electronic Devices, Hi-end General Chips and Basic Software Products" Program. And he is also the member of CCF (China Computer Federation) Big Data Technical Committee.

Dr. Zhengdong Lu
Senior researcher
Zhengdong Lu is a senior researcher at Noah's Ark Lab, Huawei. Zhengdong Lu got his Ph.D degree from Oregon Health & Science University. Before joining Huawei, Dr. Lu worked as a postdoctoral researcher in University of Texas at Austin and an associate researcher in MSRA.

Dr. Ruiming Tang
Researcher
Ruiming Tang joins Noah's Ark Lab in December 2014 as a researcher. His research topic is personalized recommendation. Ruiming Tang received his Ph.D. degree from Department of Computer Science, National University of Singapore, supervised by Associate Professor Stephane Bressan, in October 2014. Before that, he received his Bachelor degree from Northeastern University in China in July 2009.