



**THE CHINESE UNIVERSITY OF HONG KONG**  
Department of Information Engineering

*Seminar*

**Cloud Social TV Platform:  
Transforming TV Experience into 21st Century**  
by  
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Singapore

**Date : 26 May, 2014 (Mon.)**  
**Time : 11:00am – 12:00noon**  
**Venue : Room 833 Ho Sin Hang Engineering Building**  
**The Chinese University of Hong Kong**

*Abstract*

Latest market research indicates that media contents are being consumed across all devices, including TV, computer and mobile phone, at a record pace. Specifically, people in Singapore spend on average 170 hours per month on media consumption. Moreover, media are being consumed simultaneously across different devices. These emerging trends have shed profound impacts on the traditional TV experience, resulting in new challenges and opportunities in transforming TV experience in 21st century.

A paradigm shift is happening in TV industry, with the emergency of Social TV. Social TV was proposed initially to leverage TV contents to create social community among viewers, marrying TV to the social networking lifestyle of today. The scope of Social TV has been extended significantly since its debut. In this talk, we will focus on two novel social TV technologies, i.e., second-screen application and social TV analytics, for energizing people's interest in consuming TV and video contents in a social context. In the second-screen application, viewers can seamlessly migrate the video session from TV to a second device (e.g., smartphone, tablet), initiate real-time communication with peer viewers or post comments about the program onto social media platforms (e.g., Twitter, Sina Weibo). In the social TV analytics, insights can be drawn via big-data analytics from the user-generated contents about the TV programs to facilitate social engagement about the content for the viewers and benefit program directors/producers in improving the rating of their programs.

These novel applications are powered by the cloud social TV platform, developed at NTU. Our cloud Social TV technology has been touted as an innovative technology to transform the traditional "laid-back" TV viewing behavior with the proactive "lean-forward" social networking experience. This platform, when fully developed and commercialized, would transform the value of TV and potentially save it from the similar downfall of newspapers. In our system, examples of salient and sticky features include, but not limited to, virtual living room experience that allows remote viewers to watch TV programs together with text, audio and video communication modalities, video teleportation experience that allows viewers seamlessly to migrate programs across different screens (e.g., TV, smartphone and tablet) with minimum learning. Upon its debut, it has attracted world-wide attention globally in that the technology has been featured in more than 1600 news articles from 29-plus countries. We believe that this platform will transform the media industry value chain and bring tremendous value propositions to all the stakeholders.

*Biography*

Dr. Yonggang Wen is an assistant professor with school of computer engineering at Nanyang Technological University, Singapore. He received his PhD degree in Electrical Engineering and Computer Science (minor in Western Literature) from Massachusetts Institute of Technology, Cambridge, USA. Previously he has worked in Cisco to lead product development in content delivery networks, which had a revenue impact of 3 Billion US dollars globally. Dr. Wen has published over 80 papers in top journals and prestigious conferences. His latest work in multi-screen cloud social TV has been featured by global media (more than 1600 news articles from over 29 countries) and has attracted much commercial attention. His research interests include cloud computing, green data center, big data analytics, multimedia network and mobile computing.

**\*\* ALL ARE WELCOME \*\***