



THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering
Seminar

The Application and Challenge of the Solution of the Community of Shared Future in Human Cyberspace - MIN is the world's first solution to the three major problems of TCP/IP

by

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Time : 2:00pm – 3:00pm

Venue : Room 801, Ho Sin Hang Engineering Building, CUHK

Abstract

The IP network has three major problems. First, its cyberspace is a monopoly; Second, it has no built-in security, so that incidents happen all the time and they cannot be eradicated; Third, the cost in evolution and upgrading of the architecture is huge and the time it takes is very long. In 2015, on behalf of the Chinese government, President XI Jinping proposed for the first time the idea of a community of shared future in the cyberspace, which is now widely recognized. What are the technical solutions to implement this idea? This is answered by CoG-MIN, the first and by far the only comprehensive solution to the three problems of the IP network mentioned above. In this talk, we will introduce its principle, application, challenges and open problems.

Biography

Hui Li is a Professor at Peking University Shenzhen, Chief Information Scientist of IASTIC (International Academician Science & Technology Innovation Center), Foreign Academician of Russia Academy of Natural Science, Member of Expert Committee of World Digital Tech. Academy under the guidance of UN Commission on Sci. & Tech. for Developments, Fellow of IET, and Senior Member of IEEE and China CCF. He received his B.Eng. and M.S. degrees from School of Information Eng., Tsinghua University, Beijing, China, in 1986 and 1989 respectively, and Ph.D. degree from Dept. of Information Engineering, The Chinese University of Hong Kong in 2000. He was Director of Shenzhen Key Lab of Information theory & Future Internet Architecture, Director of PKU Lab of CENI (China Environment for Network Innovations), National Major Research Infrastructure.

He proposed the first co-governing future network architecture 'MIN' based on blockchain technology and implemented its prototype on Operator's Network in the world, and MIN received the award of World Leading Internet Scientific and Technological Achievements at the 6th World Internet Conference in 2019, WuZhen, China. He was invited as Guest Editor of ZTE COMMUNICATIONS March 2020 (Vol. 18, No. 1, Issue 69), with the title *Domain Name and Identifier of Internet: Architecture & Systems*. The first English monograph by theme of "Cyberspace UN" in the world has been published by Springer Publisher with the title *Co-governed Sovereignty Network: Legal Basis and Its Prototype & Applications with MIN Architecture*. His research interests include network architecture, cyberspace security, blockchain, and distributed storage. As the first author, He has published four monographs in the fields of future network architecture, consensus algorithms on blockchain, and distributed storage theory and system.

**** ALL ARE WELCOME ****