

Resilient Communications for Disaster Management

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TIME 2:30 pm - 3:30 pm

VENUE CS Seminar Room, Y6405
6th Floor, Yellow Zone
Yeung Kin Man Academic Building
City University of Hong Kong
83 Tat Chee Avenue
Kowloon Tong

ABSTRACT

Effective communication among first responders during and in the aftermath of a disaster can affect outcomes dramatically. We seek to build a resilient architecture that allows dynamically formed groups of first responders to communicate. First responder teams may be formed dynamically in response to a disaster - where the new command chain to manage the disaster may be different from the original organizational hierarchies. We propose the dynamically formed group for incident response use an information layer based on a graph-based dynamic naming schema so that first responders can conveniently communicate based on roles (names), rather than network addresses. We also seek to enable communication among first responders despite damage to the infrastructure using device-to-device communication.

This is a project that is funded by the National Institute of Standards and Technology (NIST) under the Public Safety Innovation Accelerator Program. This is joint work with Murat Yuskel (Univ. of Central Florida), Hulya Seferoglu (Univ. of Illinois, Chicago), and Jiachen Chen (Rutgers Univ.)

BIOGRAPHY

K. K. Ramakrishnan, is a Professor at UC Riverside. Previously, K. K. was a Distinguished Member of Technical Staff at AT&T Labs-Research. He joined AT&T Bell Labs in 1994 and was with AT&T Labs-Research since its inception in 1996. Prior to 1994, he was a Technical Director and Consulting Engineer in Networking at Digital Equipment Corporation. Between 2000 and 2002, he was at TeraOptic Networks, Inc., as Founder and Vice President.

K. K. is an ACM Fellow, an IEEE Fellow and an AT&T Fellow, recognized for his fundamental contributions on communication networks, including his work on congestion control, traffic management and VPN services. His work on the "DECbit" congestion avoidance protocol received the ACM Sigcomm Test of Time Paper Award in 2006. He has published nearly 250 papers and has 170 patents issued in his name. K. K. received his MTech from the Indian Institute of Science (1978), MS (1981) and Ph.D. (1983) in Computer Science from the University of Maryland, College Park, USA.

All are welcome!



In case of questions, please contact Prof Xiaohua Jia at Tel: 3442 9670, E-mail: csjia@cityu.edu.hk, or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/>.

