



**IEEE**

Technical Co-sponsor: IEEE Hong Kong Section  
Robotics and Automation/Control Systems Joint Chapter

*Jointly presents*

**SEMINAR SERIES ON CHAOS, CONTROL AND COMPLEX NETWORKS**

**Network Infrastructure Attacks**

**Dr. Alan Yeung**

Department of Electronic Engineering  
City University of Hong Kong

Date and Time: Friday, 3 April 2009, 4:30pm – 5:30pm

Venue: Room B6605, City University of Hong Kong

Reception starts at 4:15pm

(Language: **English**)

**Abstract**

In this talk, an overview on today's network infrastructure will first be provided. Network infrastructure attacks at all layers will then be introduced. This is followed by a detail discussion on layer 3 network infrastructure attacks. These include attacks to routing protocols like distance vector routing protocols, link-state routing protocols and BGP4, and DDoS attack using ICMP. In the last part of the talk, discussion on modeling network infrastructure as complex networks will be given. The discussion aims to show that such modeling can help us know the behavior of large network infrastructure under attacks.

**About the Speaker**

Dr. Alan Yeung obtained his BSc and PhD degrees from The Chinese University of Hong Kong in 1984 and 1995 respectively. He is currently an associate professor at City University of Hong Kong. Since his BSc graduation, he has spent 24 years in teaching, managing, designing and research on different areas of computer networks. In the early days of LANs in 1980s, he had the chance to involve in the design and set up of numerous networks. One of them was the largest LAN in Hong Kong at that time. He also frequently provides consultancy services to the networking industry. One notable project was the development of a GSM mobile handset in late 1990s. The team that Alan had involved successfully developed a handset prototype for a listed company in Hong Kong. Alan's extensive experience has helped him earn professional qualifications like Cisco Certified Network Professional (CCNP), Cisco Certified Academy Instructor (CCAI), and Certified Ethical Hacker (CEH).