

## G. Kesidis - Current Research Focus



**Wireless mesh networks (Neishaboori, A. Das): x-layer design and interoperation, SINR-sensitive routing, channel/queue-based opportunistic scheduling**

**p2p reputation systems (Patankar, Mortazavi): anti-spam referral system for VoIP (with C. Das), management of long-duration streaming media multicast**

**Incentive engineering, QoS: tiered residential access (CMTS/DSL), WMNs, multiple-provider wireless access, inter-domain (routing, network neutrality)**

**Secure congestion control (Nam): per-flow state management in Internet routers (with C. Das)**

**Network security (Wang, Zhang): efficient back-end processing of DPI, distributed intrusion detection (with D.J. Miller)**

**Large-scale network simulation/emulation (Carl)**

**Machine learning (Zhang, Lin, Aksu): biomedical applications (with D.J. Miller)**

# George Kesidis – Professor, CSE and EE



## Education

- 1992 Ph.D. in EECS from U.C. Berkeley

## Background

- 1992-2000: prof. in E&CE Dept, University of Waterloo, Canada
- 1999: sabbatical with Nortel Networks, Ottawa
- 2001: part-time technical staff at Mahi Networks

## Current Professional Activities

- IEEE INFOCOM 2007, Anchorage, TPC co-chair
- Workshop on Spatial Stochastic Models for Wireless Networks 2007, Cyprus, TPC co-chair
- ACM SIGCOMM Workshop on Large-Scale Attack Defense 2007, Kyoto, TPC co-chair

## Expertise

- queuing, optimization, scheduling, performance evaluation and testing (simulation and emulation), traffic and network measurement and modeling, traffic engineering, incentive engineering

## Past Support

- NSF ITR: Routing of Dynamic SLAs: Internet economics, pricing, billing, traffic control
- Cisco Ltd URP: Internet forensics, reputation systems
- DARPA/ONR MURI: Emerging Surveillance Plexsus (ESP): mobile sensor networking
- NSF ITR: Video surveillance networks
- DHS/NSF: Evaluation Methods for Internet Security Technology (EMIST, sister project of DETER)

## Current Support

- NSF NOSS: Controlled node mobility in mission-oriented sensor networks
- NSF Cyber Trust: Protecting TCP congestion control
- NSF WN – incentive engineering for multihop wireless networks
- Cisco Ltd URP: VoIP antispam systems