

Department of Computer Science

Distinguished Lecture

Product Form Solutions for Stochastic Networks: Discovery or Invention?



Erol Gelenbe

Professor in the Dennis Gabor Chair, Imperial College London
FIEEE, FACM, Knight Commander of the Order of the Star and Commander of Merit Italy, Officer of Merit of France; Member of the French National Academy of Engineering, the Turkish Academy of Sciences, and Academia Europaea

Erol Gelenbe graduated from the Middle East Technical University (Ankara) and was elected to professorial chairs successively at the University of Liege (Belgium) at the age of 27, then the University of Paris Sud-Orsay, the University of Paris V, Duke University, University of Central Florida, and Imperial College. A Fellow of IEEE and ACM, he won the ACM SIGMETRICS Life-Time Achievement Award in 2008 for contributions to computer and network performance in 2008. In 1996, he was the first Computer Scientist to win the Grand Prix France-Telecom of the French Academy of Sciences. The President of Italy conferred him the honour of Knight Commander of the Order of the Star and of Commander of Merit. He is also an Officer of Merit of France. He is a member of the French National Academy of Engineering, the Turkish Academy of Sciences, and of Academia Europaea.

Date: March 15, 2010 (Monday)

Time: 14:30

**Venue: Lecture Theatre 1 (LT1)
Ho Sin Hang Campus, HKBU**

Abstract: Since the late 1960's, it has been shown that many practical systems that arise in operations research, chemistry, genetics, neuroscience, economics, etc. can be effectively and realistically represented by stochastic systems which have provable "product forms" in which the joint distribution of system state at equilibrium is the product of the marginal sub-system distributions. Examples include diverse and important systems including neuronal networks, the Internet, systems of chemical reactions, service systems in operations research and networked economic auctions. This lecture will summarise some of these results and try to motivate research on why we need to discover how product form solutions come about.

ALL ARE WELCOME

Website & Online Registration: <http://www.comp.hkbu.edu.hk/dlecture>

Tel: 3411 7079 3411 2387

Email: comp@comp.hkbu.edu.hk