



THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Seminar

**Modeling and economic analysis of
cloud brokering platform under uncertainty:
choosing risk/profit tradeoff**

by

Professor Alexei A. Gaivoronski
Norwegian University of Science and Technology (NTNU)
Norway

Date : 16 Sept., 2013 (Mon.)
Time : 4:00pm – 5:00pm
Venue : Room 833, Ho Sin Hang Engineering Building
The Chinese University of Hong Kong

Abstract

This talk we describe models for analysis of cloud brokering platform under conditions of risk and uncertainty of demand, focusing on controlling the risk of not delivering the Quality of Service required by users. Such risk can occur due to inherent limitations of the best effort connectivity. We take the approach of modern portfolio theory and show how the tradeoff between risk and profit can be chosen by selection of efficient connectivity portfolios that combine the best effort connectivity of different grades with premium grade connectivity. We provide theoretical analysis of connectivity portfolio models and related insights delivered by numerical experiments that utilize the measurements of Internet traffic.

Biography

Professor Alexei A. Gaivoronski is Professor of Industrial Economics and Operations Research at the Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology (NTNU).

He got his PhD in operations research from Moscow Institute for Physics and Technology. His research interests include information- and telecommunications (ICT) economics, optimization under uncertainty, simulation and analysis of stochastic systems, risk management in finance, industry and services. He has published more than 70 research papers on these subjects. He hold different teaching and research positions at International Institute for Applied Systems Analysis (Austria), V. Glushkov Institute of Cybernetics (Ukraine), Universities of Milan and Cagilari (Italy), University of Paris Sud (France).

Besides academia, he worked and consulted for different enterprises in ICT sector (Italtel, IBM, Xerox, Telenor).

**** ALL ARE WELCOME ****