

第十屆暑期作業研究與供應鏈管理研習營

- **主旨：**延請國際知名在作業研究與供應鏈管理領域之傑出學者，來台講授相關領域之先進研究議題，與國內學者與研究生進行交流，以其提昇台灣學界在作業研究與供應鏈管理領域研究之水準，並協助提供國內學者及研究生與傑出國際學者交流的管道。
- **對象：**希望進修作業研究與供應鏈管理領域研究主題之(1)教師、(2)博士班研究生、(3)碩士班研究生

📅 時間：2018年6月24日(日)~6月25日(一)

📍 地點：國立交通大學 台北校區 五樓第一演講廳 (台北市忠孝西路一段118號)

📖 邀請講授學者：

Prof. Vernon Ning HSU (Choh-Ming Li Professor, Chinese University of Hong Kong)


Dr. Jefferson HUANG (Postdoctoral Associate, Cornell University)

Prof. Andrew L. LIU (Associate Professor, Purdue University)

- **主辦單位：** 國立交通大學管理學院 運籌與供應鏈管理研究中心、運輸與物流管理系
- **協辦單位：** 國立台灣大學工業工程研究所
國立清華大學工業工程與工程管理系
科技部工業工程與管理學門、台灣作業研究學會
中國工業工程學會、中華民國運輸學會

👥 籌備委員 (依姓氏筆畫順序排序)

- 丁慶榮 (元智大學)
- 方述誠 (北卡羅來納州立大學)
- 王茂駿 (中國工業工程學會)
- 李捷 (元智大學)
- 李雨青 (國立清華大學)
- 吳政鴻 (國立台灣大學)
- 林妙聰 (國立交通大學)
- 林義貴 (國立台灣科技大學、台灣作業研究學會)
- 姚銘忠 (國立交通大學)
- 洪一薰 (國立台灣大學)
- 時序時 (淡江大學)
- 陳文智 (國立交通大學)
- 張國浩 (國立清華大學)
- 喻奉天 (國立台灣科技大學、POMS, Taiwan Chapter)
- 廖崇碩 (國立清華大學)
- 簡禎富 (國立清華大學、科技部工業工程與管理學門)
- 林良泰 (中華民國運輸學會)



邀請之國外傑出學者之講授主題與摘要

1. **Prof. Vernon Ning HSU** (Choh-Ming Li Professor, CUHK Business School, Chinese University of Hong Kong)

Title: Tax-aligned Supply Chain Management

Abstract:

The speaker will first survey the research on “Modeling Multichannel Supply Chain Competition with Marketing Mixes.” He will then share his working experience in this area and present several related research papers including topics on “Exclusive Channels and Revenue Sharing in a Complementary Goods Market” and “Price Matching Negotiation in Competing Channels.”

2. **Dr. Jefferson HUANG** (Postdoctoral Associate, School of Operations Research and Information Engineering, Cornell University)

Title: Markov Decision Processes and their Applications to Supply Chain Management

Abstract:

In managing a supply chain, one must make decisions over time in the face of uncertainty. Markov decision processes (MDPs) provide a general and useful framework for making these kinds of decisions. In this tutorial, we provide a self-contained introduction to MDPs in the context of supply chain management. Topics include methods for computing optimal decisions, and applications to problems in supply chain management.

3. **Prof. Andrew L. LIU** (Associate Professor, School of Industrial Engineering, Purdue University)

Application of Optimization and Game-Theoretic Models in a Smart Electric Grid

Abstract:

A smart power grid is characterized by a diverse of generation and storage resources, more distributed generation, and active demand response. The traditional centralized optimization approach for planning and operation is no longer sufficient in accommodating the increased uncertainties from renewable energy and the many distributed resources.

To address such challenges, we propose two frameworks. The first targets power systems’ long-term planning, where we propose to use the predictor-corrector proximal method (PCPM) to solve a centralized optimization in a decentralized fashion. Convergence can be shown for convex problems, and numerical results on solving stochastic problems will be presented.

The second framework targets how to integrate electricity demand response in a distributed fashion. We propose a multiarmed bandit (MAB) game approach in which each consumer uses MAB to learn the best time to use electricity. Numerical results show very fast convergence to a steady-state of the MAB game with much reduced price volatility.

🕒 預定時程安排

時段	6/24 (SUN)	6/25 (MON)
09:00-09:25	Registration	Registration
09:25-09:30	Starting address	Starting address
09:30-11:30	Dr. Jefferson HUANG Markov Decision Processes and their Applications to Supply Chain Management (Part 1)	Dr. Jefferson HUANG Markov Decision Processes and their Applications to Supply Chain Management (Part 2)
11:30-13:00	Lunch break	Lunch break
13:00-15:00	Prof. Andrew L. LIU Application of Optimization and Game-Theoretic Models in a Smart Electric Grid (Part 1)	Prof. Andrew L. LIU Application of Optimization and Game-Theoretic Models in a Smart Electric Grid (Part 2)
15:00-15:30	Tea break	Tea break
15:30-17:30	Prof. Vernon Ning HSU Tax-aligned Supply Chain Management (Part 1)	Prof. Vernon Ning HSU Tax-aligned Supply Chain Management (Part 2)

👉 報名費用：免費（研習營免費提供授課紙本講義，其餘由學員自行負擔）

📧 主辦單位聯絡教師：

姚銘忠教授(myaoie@gmail.com)

🔗 研習營報名網址：[Click here](#)

☎ 研習營相關問題聯絡：

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國立交通大學 管理學院

✍ 講授學者介紹

Prof. Vernon Ning HSU

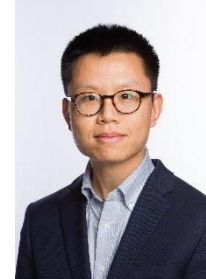
Choh-Ming Li Chair Professor,
Department of Decision Sciences & Managerial Economics
CUHK Business School
The Chinese University of Hong Kong
Shatin, NT, Hong Kong



Dr. Vernon Hsu (徐寧) is a Choh-Ming Li Chair Professor in the CUHK Business School, The Chinese University of Hong Kong. He had also held faculty positions at the University of New South Wales, Australia, George Mason University, USA, and Hong Kong University of Science & Technology. Professor Hsu's research interests include logistics and supply chain management and the application of optimization theory in Operations Management and Information Systems. Some of his current research projects investigate the integration of international tax planning with global supply chain design. His research has been published in journals such as Management Science, Manufacturing and Service Operations Management, Operations Research and Productions and Operations Management.

Prof. Jefferson HUANG

Postdoctoral Associate,
Operations Research and Information Engineering,
Cornell University
Ithaca, New York 14850



Dr. Jefferson Huang is a Postdoctoral Associate in the School of Operations Research and Information Engineering at Cornell University. He received his PhD in Applied Mathematics in 2016 at Stony Brook University. He also holds a Master of Science in Transportation from MIT and a B.S. in Civil and Environmental Engineering from UC Berkeley. In the Fall of 2018, he will be joining the Operations Research Department at the Naval Postgraduate School as an Assistant Professor. His research interests include applied probability, optimization under uncertainty, and operations management.

Prof. Andrew L. LIU

Associate Professor,
School of Industrial Engineering,
Purdue University
West Lafayette, IN 47907-2023



Dr. Andrew Liu (劉路) is an Associate Professor with the School of Industrial Engineering at Purdue University, where he joined in 2009. He received his Ph.D. in Applied Mathematics and Statistics from The Johns Hopkins University in 2009, and a B.S. in Applied Mathematics from Beijing Institute of Technology. Dr. Liu's main research lies in the interactions of optimization and game theory, with applications to model and analyze energy markets, environmental policies, and smart grid. He has received two best publication awards from the Institute for Operations Research and Management Science (INFORMS), and is the Purdue Discovery Park Research Fellow in 2014 – 2015. His work has been funded by multiple agencies, including NSF, DOE, U.S. Air Force, and California Energy Commission. Before joining Purdue, Dr. Liu worked at the management consulting company, ICF International, in Fairfax Virginia, responsible for developing large-scale optimization models for energy market and environmental policy analysis.

➡ **台北市住宿相關資訊**

1. KDM Hotel (凱統飯店)

地址：台北市大安區忠孝東路3段8號

No.8, Sec. 3, Jhongsiao E. Rd., Da-an District, Taipei City 106, Taiwan (R.O.C.)

電話：(02) 2721-1162

傳真：(02) 2711-9096

網址：<http://www.kdmhotel.com.tw/>

2. Caesar Park Hotel (台北凱撒大飯店)

地址：台北市忠孝西路一段38號

電話：(02) 2311-5151

網址：<http://taipei.caesarpark.com.tw/>

3. Agoda 線上訂房系統

網址：<http://www.agoda.com/zh-tw>