

Biography of Andrew Lim

Andrew Lim obtained his PhD in Computer Science in 1992 from the University of Minnesota. At present, he is Professor and Head of Department of Management Sciences at the City University of Hong Kong. The aim of Andrew's research is to help companies compete effectively. This includes deriving customized business value models; identifying key performance indicators, and developing optimized processes that improve these indicators. Andrew's works have been published in key journals in Operations Research and Management Science, and disseminated via international conferences and professional seminars. More importantly these works have contributed to substantial impacts to many renowned multi-national companies leading to international awards and company-wide innovative prizes. However, among the number of activities that Andrew has undertaken, he derives greatest satisfaction in education and mentoring which resulted in strong placements of his students at all levels.

Employment History

From 1992-1997, Andrew served in the Government of Singapore in various organizations such as Singapore Armed Forces, National Computer Board of Singapore, and the Information Technology Institute. From 1997-2002, he was an associate professor in the Dept of Computer Science at the National University of Singapore. From 2002-2008, he was an associate professor in the Dept of Industrial Engineering and Logistics Management at the Hong Kong University of Science and Technology.

Selected Recent Research Publications (From a total of more than 200 publications)

1. "Combined Pricing and Inventory Control for a Perishable Product with Two-Period Lifetime," Y. Li, A. Lim, B. Rodrigues, *Manufacturing and Service Operations Management*, accepted.
2. "Assessing the qualitative influence of journals in a citation network," A. Lim, H. Ma, Vendy Wen, Z. Xu, B. Cheang, *Communications of ACM*, accepted.
3. "Transportation Procurement with Seasonally-Varying Demand," A. Lim, B. Rodrigues, Z. Xu, *Operations Research*, May-June 2008; 56: 758 – 771.
4. "An Effective Local Search Method to solve the Flexible Demand Assignment Problem," F. Wang, A. Lim, *IEEE Transactions on Automation Science and Engineering*, Volume 5, Issue 2, April 2008 Page(s):289 – 297.
5. "A Two-Stage Heuristic with Ejection Pools and Generalized Ejection Chains for the Vehicle Routing Problem with Time windows", A. Lim and X. Zhang, *Inform's Journal on Computing*, Volume 19, Number 3 (Summer 2007), 443-457.
6. "Global Sourcing Using Local Content Tariff Rules," Y. Li, A. Lim, B. Rodrigues, *IIE Transactions*, Volume 39, Issue 5 May 2007, 425-437.
7. "A Transportation Problem with Minimum Quantity Commitments," A. Lim, F. Wang, and Z. Xu, *Transportation Science*, Vol 40, No. 1, Feb 2006, pp. 117-129.
8. "The Bottleneck Problem with Minimum Quantity Commitment", A. Lim and Z. Xu, *Naval Research Logistics*, Volume 53, Issue 1, 2006, 91-100.
9. "A Note on the Optimal EOQ for Announced Price Increases in Infinite Horizon," A. Lim and B. Rodrigues, *Operations Research*, Volume 53, No. 4, July-August 2005, 731-732.
10. "Meta-Heuristics with Local Search Techniques for Retail Shelf Space Optimization", A. Lim, B. Rodrigues, X Zhang, *Management Science*, Volume 50, No. 1, January 2004, pp. 117-131.

Illustrative Education and Mentoring Achievements

PhD Graduates:

- Xu Zhou (PhD 2007) came in second in the 2007 Transportation Science and Logistics (TSL) best doctoral dissertation award. The TSL award is the oldest and most prestigious honor for doctoral dissertations in the area of transportation science and logistics. Xu Zhou received numerous offers from the industry and Universities in Hong Kong. At present, he is an Assistant Professor in the Department of Logistics and Maritime Studies at the Polytechnic University of Hong Kong. His starting annual compensation at Poly U is estimated at One Million Hong Kong dollars.
- Chen Qun (PhD 2004) is a Professor at Northwest Polytechnic University; Miao Zhaowei (PhD 2006) an Associate Professor at Xiamen University; Li Yanzhi (PhD 2006) an Assistant Professor at City University of Hong Kong; Li Xi (PhD 2007) Netease, China; Xiao Fei (PhD 2007), Google USA; Ma Hong (PhD 2008) a Visiting Assistant Professor at Singapore Management University; Vendy Wen (PhD 2009) post-doc at CityU; Xu Jing (PhD 2009) Assistant Professor at Tsinghua University.

Masters and Bachelors:

- Students have either gotten good positions in the industry or have continued their PhD studies with scholarships in Computer Science, Business, or Industrial Engineering in top universities such as Stanford (Graduate School of Business), Princeton, Oxford University, Cornell University, and etc.
- Mr Zhang Xingwen (my undergrad student) who did his honors year research with me, jointly wrote a Management Science paper, a paper in INFORMS Journal on Computing and two papers in European Journal on Operational Research. He is currently completing his PhD at Stanford University.
- Mr Zhu Yi (my undergrad student) who did his honors year research with me jointly published 17 research papers in international refereed conferences and journal. He completed his PhD in Computer Science from the University of San Diego.

Others

- As the coach and trainer of the Singapore International Olympiad in Informatics team, the team came in first (out of 74 countries) in the world in IOI 2001 (Finland) beating traditional powerhouses China, Russia, and USA. This is the first and only achievement in the history of Singapore for any academic Olympiad.
- As the coach and trainer of the NUS ACM Programming Team from 1998-2003, NUS team has consistently been one of the top teams in Asia and has achieved strong placements in the World Finals.

Industrial and Research Projects

Awards and Recognition

- 2008/2009 Franz Edelman Award Semi-Finalists for our work on Philips Strategic Transportation Procurement Systems.
- 2007 Innovative Application of Artificial Intelligence Award by the Association for the Advancement of Artificial Intelligence (AAAI) for our work on www.journal-ranking.com
- 2nd Place, Philips Supply Management Contest for our work on developing a strategic procurement system for full container load (2006)
- 2006 Innovative Application of Artificial Intelligence Award by AAAI for our work on Strategic Freight Procurement for Air Freight and Air Courier
- 2002 Innovative Applications of Artificial Intelligence Award by AAAI for our work on University Exam Timetabling System for the National University of Singapore in 2001
- Runners Up, Singapore Startup Contest (2002)

Industrial Projects Sampler

- Co-creator of a number of commercial products such as Simplify (RFID Middleware), AssetTrac (RFID Asset Tracking System), VROOM (Vehicle Routing, Operations, and Optimization Manager), Port2Port (Strategic Transportation Procurement System), AFIRMS (Freight Auditing System), www.journal-ranking.com, www.acadepedia.com, and www.computational-services.com
- HKMex: The Hong Kong Mercantile Exchange Portal
- BOSS: Strategic Transportation Procurement System that handles about 500 million USD of freight contract for Philips

Consulting Engagements Sampler

- Jun 2007 – **Metro Group Buying**
Jan 2008 Scope of consulting include:
- Business Value Model to maximize business performance
 - Analytics to improve performance
 - Knowledge sharing of the advances and best practices in logistics and supply chain
- Metro Group Buying is the direct sourcing identity of the entire Metro Group. Metro Group is one of the largest retailers in the world with annual revenues exceeding USD70 billion.
- 2005 – **Koninklijke Philips Electronics N.V.**
to date Worldwide strategic procurement of transportation, including transportation modes such as FCL, LCL, Air Freight, Air Courier, and Trucking. Philips' annual procurement volume is more than USD 500 million
Koninklijke Philips Electronics N.V. is one of the largest electronic companies in the world with annual revenues exceeding Euro 26 billion.

Others Clients include:

Southern China Airlines, Hong Kong Mercantile Exchange, HCL, Kerry Logistics, Maxims Hong Kong, RCG Limited, IDS International, Autotoll Limited, Singapore International School (Hong Kong), Defence Science and Technology Agency (Singapore), Systems and Computer Organization (Singapore), 3CX (USA), Asia Pacific Management Center (Singapore), Singapore Institute of Management (Singapore), Port of Singapore Authority, Singapore Airlines, Ministry of Education (Singapore).

Research Projects

In addition, I have obtained more than four million USD of research projects from various agencies in Hong Kong and Singapore.