Jian Wu

(852) 5495 9194 ricardo8@hku.hk hiwujian.com

EDUCATION

University of Hong Kong, Hong Kong SAR

2015 - 2019

- B.Eng in Industrial Engineering, cGPA: 3.7/4.0, major GPA: 3.96/4.0
- Bachelor's thesis: "Dynamic Pricing for Electric Vehicle Sharing"

University of Wisconsin-Madison, Madison, WI, US

Jan - May 2018

• International Academic Programs (IAP), GPA: 4.0/4.0

Hangzhou No.2 High School, Hangzhou, Zhejiang, China

2012 - 2015

• The 2nd Prize in National Physics Olympiad (CPhO), 2013 & 2014

RESEARCH INTERESTS

I am broadly interested in queueing theory, stochastic programming, fluid models, and their applications in planning and revenue management of supply chain, transport and energy systems.

PUBLICATION

Wu, Jian, et al. (2019). A Continuous Model for Electric Vehicle Sharing with Battery Degradation. [Extended Abstract]. The Tenth Triennial Symposium on Transportation Analysis (TRISTAN)

Summary:

- We propose an integrated model for EV sharing systems design in a continuous 2D space. This model aims to optimize the system design considering the joint impact of battery charging and degradation, hence provides decision support on the charge station deployment, fleet balancing operations, and the battery charging and replacing policy. An analytical solution is developed by applying optimal transport theory to a network fluid model in the continuous space.
- We are extending the work for a journal article, which may be submitted to Transportation Science.

CONFERENCE

Smart Airport - Technovation Conference & Exhibition 2018

Nov 2018

RESEARCH EXPERIENCE

Final Year Research, *IMSE*, *University of Hong Kong*Project: Dynamic Pricing for Electric Vehicle Sharing

• Investigated the revenue management problem in EV sharing system and proposed a queueing network model incorporates robust vehicle reposition and dynamic pricing to maximize the system profit.

Core Member, Smart City Datathon 2018

Oct 2018

Project: AirGo - Airport Internal E-Commerce System

- Won the Second Runner-up (20,000 HKD) and was invited to the final round of Cyberport Creative Micro Fund Program
- Cleaned more than 1 million passenger flow data in the Hong Kong International Airport and identified optimal storage station deployment based on the flow

Research Assistant, ISyE, UW-Madison

May - Aug 2018

Project: Electric Vehicle Sharing with Battery Degradation

Advisor: Dr. Xin Wang

 Proposed a EV sharing model in the continuous space and creatively applied optimal transport theory to develop an analytical solution for the fluid approximation formulation.

Team Leader, Maritime & Logistics Hackathon 2017

Project: A Maritime Information and Tracking Platform

• Won the Champion (top 5%) and a prize of 50,000HKD

• Developed a platform to evaluate logistics companies' performance

Research Helper, IMSE, University of Hong Kong

Jan - Jun 2017

Dec 2017

Project: A Column Generation-based Algorithm for Energy Minimization Vehicle Routing Problem

Advisor: Dr. J.W.Wang

• Investigated EMVRP and independently implemented a brand-cut-and-pricing algorithm using column generation.

AWARDS AND HONORS

China Soong Ching Ling Foundation

• China Soong Ching Ling Foundation Scholarships

2015-2019

University of Hong Kong

• Dean's Honours List

2016-2017

• Lee Shau Kee Scholarships for student enrichment

2018

University of Wisconsin-Madison

Exchange & Visiting International Student Academic Excellence award 2018
A recognition for exchange and Visiting International Student Program participants who excelled in their coursework on UW-Madison campus.

Asian Institute of Supply Chains & Logistics

• 2nd Runner-up, Smart City Datathon 2018 (13%)

Oct 2018

• Champion, Maritime & Logistics Hackathon 2017 (5%)

Dec 2017

SERVICE EXPERIENCE

Student Mentor

2018 - 2019

Faculty of Engineering, The University of Hong Kong

• Counseled fresh undergraduates on their academic plans and program selection

Chairperson

2017 - 2018

Industrial Engineering Association, The University of Hong Kong

• Organized student activities and maintained and external relationships.

Technician & Volunteer

Jun - Jul 2016

Beyond the Pivot Africa Volunteer Program, Ghana

- Designed and constructed a lavatory in Wa, Ghana
- Conducted a woman empowerment program in the local community.

WORK EXPERIENCE

Undergraduate Teaching Assistant

Sept 2018 - Present

The University of Hong Kong, Hong Kong SAR

• IMSE2134 Operational Research, Fall 2018

Digital Marketing Analyst

Jul 2017

Kong Sing Manufactory Co., Ltd, Hong Kong SAR

• Launched Kong Sing's new website and maintained the social media presence.

Job Shadowing

Jun 2016

Sysmex Corporation, Kobe, Japan

SKILLS

Languages: C/C++, Python, MATLAB, Julia, R, Bash Script, VBA

Software: ILOG CPLEX, Gurobi, Mosek, CLP, CBC

Others: LATEX, Git, Linux, Bash, Markdown, HTML, CSS, Arduino