

# XIANG LI

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## RESEARCH INTERESTS

<b>Methodological areas</b>	Stochastic Programming, Mixed-integer Optimization, Deep Learning
<b>Application areas</b>	Healthcare Scheduling

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## EDUCATION

### School of Applied Mathematics, Beijing Normal University, Zhuhai

B.A. in Financial Mathematics; GPA: 3.52/5.0, [top 15%]

Sept. 2015 - July 2019

**Relevant Coursework:** Probability and Mathematical Statistics, Operations Research

### Department of Mathematics, National Central University, Taiwan

Exchange student in Mathematics; GPA: 4.10/5.0

Feb. - July 2017

**Relevant Coursework:** Functions of One Complex Variable, Methods of Numerical Computation

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## PAPER IN PREPARATION

Xie, W., Wang, S., Li, X., Zheng, C., Adaptive Robust Homecare Resource Planning.

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## RESEARCH EXPERIENCE

### Home Health Care Resource Planning

Beijing City, China

School of Economics and Management, University of Chinese Academy of Sciences

Mar. 2020 - Present

Research Assistant, PI: Prof. Shuming Wang

- Research goal: Schedule the optimal allocation solution of the HHC service system under the uncertain service demand.
- Responsibilities: Participate in the algorithm development to solve a large-scale mixed-integer programming problem; Conduct experiments to evaluate the performance of proposed models and algorithms with **Gurobi**.
- Achievement: Contribute to a research paper *Robust Homecare Service Capacity Planning*, which is already submitted to the Computers and Operations Research.

### Summer Research Seminar of Artificial Intelligence

Online

Department of Electrical and Computer Engineering, University of Illinois, Urbana-Champaign

July - Aug. 2020

Instructor: Prof. Rakesh Kumar

- Explored techniques based on the hidden Markov model and the Markov decision process.
- Learned the application and mathematical principles of linear and nonlinear classifiers, e.g., SVM, Perceptron, etc.

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## PROFESSIONAL EXPERIENCE

### Oracle (China) Software Systems Co., Ltd.

Beijing City, China

Data Analyst, Data Camp

Nov. 2019 - Feb. 2020

- Explored Oracle 19c Autonomous Database, Oracle **SQL**, and **PL/SQL** through internal training programs.
- Collaborated with the director Mr. Alexander Jing to map out the schematic schedule of a 1,200 KTA ethylene plant using Primavera P6.

### Orient Overseas Container Line Co., Ltd.

Zhuhai City, China

Assistant Technical Engineer(Intern) & Data Analyst

Jan. - Apr. 2019 & July - Nov. 2019

- Collaborated with the team to develop an online delivery platform called E-DO with **Java Spring** Framework.
- Implemented Mask R-CNN algorithm to segment the front door of container using **Python**; Achieved AP[.50:.05:.95]:0.900.

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## HONORS AND AWARDS

First Prize Scholarship in Major

2018

Third prize of Guangdong Province in the Contemporary Undergraduate Mathematical Contest in Modeling

2017

Individual Scholarship (The C Programming Language, [rank 1/85])

2016

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## SKILLS

<b>Languages:</b>	C, Python, LaTex, Java, SQL
<b>Mathematical Software Tools:</b>	Gurobi, MATLAB
<b>Libraries:</b>	TensorFlow, Numpy, OpenCV