

Oh, Hyun-Ju
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Research Interests

- Nonconvex optimization
- Convexification
- Conic programming
- Integer programming

EDUCATION

Ph.D. of Philosophy, Quantitative Methods 2016-NOW

Purdue University, West Lafayette

- Advisor: Prof. Mohit TAWARMALANI

Master of Engineering in Industrial Management Engineering 2012-2015

Korea University, Seoul

- Dissertation title: “A Study on Lift-and-Project Methodology”
- Advisor: Prof. In-Chan CHOI
- Committee: Prof. In-Chan Choi, Hong-Seo Ryoo, Seung-Bum Kim
- GPA: 4.08/4.50

Bachelor of Science in Industrial Management Engineering and Mathematics 2008-2012

Korea University, Seoul

- First Major: Industrial Management Engineering
- Second Major: Mathematics
- Minor: Business Administration
- Advisor: Prof. In-Chan CHOI
- GPA: 3.91/4.50

Research Experience

Graduate Student 2012-2015

System Optimization Lab., Korea University

- Obtained optimization knowledge such as network optimization and integer programming through the classes.
- Studied convex optimization and disjunctive programming needed for the research, and participated in the student seminar on linear algebra, linear programming, and integer programming in the lab.
- Studied and investigated lift-and-project methods in the context of polyhedral projection, and derived lift-and-project cut using interior point algorithm.

Undergraduate Research Student

2011-2012

System Optimization Lab., Korea University

- Studied the papers about lift-and-project method and studied polyhedral theory.
- Participated in convex optimization student seminar in the lab.

Manuscripts in Preparation and Under Review

- Hyun-ju Oh, In-Chan Choi, Separation problems in the lift-and-project method for mixed 0-1 integer linear programs, in revision

Teaching Experience

Teaching Assistant, MGMT305 Business Statistics, *Purdue University* Fall 2016-Fall 2017

Grading Assistant, ISC101A Calculus I & ISC101B Calculus II, *Korea University* (Korea University international summer campus) Summer 2015

Teaching Assistant, IMEN320 Optimization Application, *Korea University* Spring 2013

University Service

Administrative Assistant, College of Education, *Korea University* 2012-2014

Assistant Supervisor, Foreign Language Center, *Korea University* DEC. 2012, FEB.2013

Technical Skills

- Programming languages and mathematical packages: Matlab, C++
- Commercial optimization solver: Gurobi