# Jaeyoung Cho

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## **EDUCATION**

### UNIVERSITY OF HOUSTON

PHD IN INDUSTRIAL ENGINEERING August 2016 | Houston, TX

#### **KOREA UNIVERSITY**

ME IN INDUSTRIAL ENGINEERING Feb 2006 | Seoul, Korea

#### TROY UNIVERSITY

MS IN INTERNATIONAL RELATIONS Dec 2013 | Troy, Alabama

#### **KOREA MILITARY ACADEMY**

BA IN INTERNATIONAL RELATIONS Feb 2000 | Seoul, Korea

## SKILLS

#### **PROGRAMMING**

GAMS • CPLEX • LINGO • LINDO C++ • SIMIO • MATLAB • R LATEX• LINUX • MS Office series

#### **LANGUAGES**

Korean (native), English (advanced) Chinese (basic)

# **COURSEWORK**

#### **GRADUATE**

Advanced Linear Optimization
Nonlinear Programming
Integer Programming
Management Science and Its Applications
Operations Research
Engineering Economics
Supply Chain Management
Product Development Engineering
Advanced Topics in Information Systems
Probability and Statistics for Engineer
Experimental Design
Nuclear Safety and Security
Conflict Management
International Political Economy
World Affairs (Asia and Middle East)

## **EXPERIENCE**

#### LAMAR UNIVERSITY | Assistant Professor

September 2016-Present| Beaumont, TX

# **UNIVERSITY OF HOUSTON** | RESEARCH & TEACHING ASSISTANT

August 2013 - July 2016 Houston, TX

 Developing Optimization Models and Risk Analysis Techniques for Oil and Gas Industry, Maritime Security, Healthcare Service, and Military Operations (funded by Qatar National Research Fund)

#### REP. OF KOREA ARMY | MILITARY OFFICER (MAJOR, O-4)

Mar 2000 - Aug 2012 | Korea, Iraq, and Lebanon

- Military Dialogue Officer, UN Command Military Armistice Commission (2011-2012)
- Special Staff Officer for Force Commander, United Nations Peacekeeping Mission in Lebanon (2010-2011)
- Crisis Action Officer / Airspace Officer / Briefing Officer, Rep. of Korea & US Combined Forces Command HQ (2008-2010)
- Special Forces Det. Commander, Multinational Forces in Iraq (2007)
- Aide-de-camp to the Commanding General, 11th Infantry Division (2001-2002)

## **INFORMS\* UH STUDENT CHAPTER** | PRESIDENT

January 2015 - December 2015 | Houston, TX

 Organized 1st UH Industrial Engineering Research Conference and Expo (April 24, 2015)

\*INFORMS: Institute for Operations Research & Management Science

#### HIGHLIGHTED RESEARCH WORKS

September 2014 - Present

- J. Cho, G. Lim, B. Taofeek and S. B. a. H. Parsaei, "Liquefied natural gas ship route planning model considering market trend change," Transactions on maritime science, vol. 3, no. 02, pp. 119-130, 2014.
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "An optimal sonar placement approach for detecting underwater threats under budget limitations," Journal of Transportation Security, pp. 1-18, 2015.
- J. Cho, G. Lim, B. Taofeek and S. B. a. H. Parsaei, "Multi-UAV Pre-positioning and Routing for Power Network Damage Assessment," (submitted to IEEE Transactions on Smart Grid).
- J. Cho, G. Lim, T. Biobaku and S. J. Kim, "LNG inventory routing problem under uncertain weather conditions," (working paper).
- S. Bora, G. Lim, T. Biobaku and S. J. Cho, H. Parsaei, "Node Criticality Index: Assessing the Supply Chain Resiliency of a Supply Chain Network Under Disruption," (submitted to Annals of Operations Research).
- J. Cho, G. Lim, T. Biobaku, S. J. Kim and H. Parsaei, "Safety and security management with Unmanned Aerial Vehicle(UAV) in oil and gas industry," in Procedia Manufacturing, Las Vegas, 2015.
- J. Cho, G. Lim and S. J. Kim, "Use of Unmanned Aerial Vehicle (UAV) to aid healthcare delivery service," in IIE Annual Conference, Nashville, 2015.

#### **PUBLICATIONS**

- J. Cho, G. Lim and S. J. Kim, "In-air launch and recovery of multiple drones from an airborne drone carrier," working paper.
- G. Lim, S. Kim and J. Cho, Y. Gong, A. Khodaei, "Multi-UAV prepositioning and routing for power network damage assessment," (submitted to IEEE Transactions on Smart Grid).
- J. Cho, G. Lim, T. Biobaku and S. J. Kim, "LNG inventory routing problem under uncertain weather conditions," (submitted to European Journal of Operational Research).
- S. Bora, G. Lim, T. Biobaku and S. J. Cho, H. Parsaei, "Models and Computational Algorithms for Maritime Risk Analysis: A review," (submitted to Annals of Operations Research).
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "An optimal sonar placement approach for detecting underwater threats under budget limitations," Journal of Transportation Security, pp. 1-18, 2015.
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "Literature survey on underwater threat detection," Transactions on maritime science, vol. 4, no. 01, pp. 14-22, 2015.
- J. Cho, G. Lim, B. Taofeek and S. B. a. H. Parsaei, "Liquefied natural gas ship route planning model considering market trend change," Transactions on maritime science, vol. 3, no. 02, pp. 119-130, 2014.
- J. Cho and S. K. Kim, "The impact of Information-centric force improvement on deterrence of invasion on the Korean peninsula: a game theoretic analysis," Military Operations Research Korea, vol. 31, no. 1, pp. 1-13, 2005.
- J. Cho, "A two-stage stochastic approach to the artillery fire sequencing problem," Military Operations Research Korea, vol. 31, no. 2, pp. 28-44, 2005.

#### CONFERENCE PROCEEDINGS / PRESENTATIONS

- J. Cho, G. Lim, T. Biobaku, S. J. Kim and H. Parsaei, "Safety and security management with Unmanned Aerial Vehicle(UAV) in oil and gas industry," in Procedia Manufacturing, Las Vegas, 2015.
- T. Biobaku, J. Cho, G. Lim, S. J. Kim and H. Parsaei, "Liquefied natural gas ship route planning: a risk analysis approach," in Procedia Manufacturing, Las Vegas, 2015.
- J. Cho, G. Lim and S. j. Kim, "A mothership-based UAV routing problem in support of counterfire operations," in INFORMS Annual Conference, Philadelphia, 2015.
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "Optimal sonar deployment in a maritime environment: A fortification approach," in INFORMS, Philadelphia, 2015.
- J. Cho, G. Lim and S. J. Kim, "Use of unmanned aerial vehicle (UAV) for risk monitoring in oil and gas industry," in IIE Annual Conference, Nashville, 2015.
- J. Cho, G. Lim and S. J. Kim, "Use of Unmanned Aerial Vehicle (UAV) to aid healthcare delivery service," in IIE Annual Conference, Nashville, 2015.
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "Case studies on maritime incidents: a review," in IIE Annual Conference, Nashville, 2015.
- J. Cho, G. Lim, T. Biobaku, S. Bora and H. Parsaei, "Robust liquefied natural gas shipping problem under Shamal disruptions," in INFORMS Annual Conference, San Francisco, 2014.
- T. Biobaky, G. Lim, J. Cho, S. Bora and H. Parsaei, "Optimal deployment of underwater sonar system," in INFORMS, San Francisco, 2014.
- S. Bora, G. J. Lim, T. O. Biobaku, J. Cho and H. R. Parsaei, "Assessing the resiliency and importance of a supply chain network," in International Conference on Computers & Industrial Engineering, Turkey, 2014.
- J. Cho, G. J. Lim and T. Biobaku, "Liquefied Natural Gas (LNG) inventory routing problem under weather disruptions: a case study of dust storm in Persian Gulf," in THC-IT-2014 Conference & Exhibition, Houston, 2014.
- J. Cho, G. Lim, T. Biobaku, S. Bora and H. Parsaei, "A stochastic approach to liquefied natural gas (LNG) ship route planning model under weather disruptions," in Qatar Foundation Annual Research Conference, Doha, 2014.
- T. Biobaku, G. Lim, J. Cho, S. Bora and H. Parsaei, "Under-water sonar placement," in IIE Annual Conference, Montreal, 2014.
- J. Cho, H. Moon and D. Jang, "Fast adaptive image interpolation algorithm for a battlefield visualization system," in Korea Management Information Annual Conference, Jeju, 2005.
- J. Cho, H. Moon and D. Jang, "An interpolation algorithm considering diagonal factors for enhancing the quality of digital images," in Korea Management Information System Annual Conference, Seoul, 2004.