

Curriculum Vitae

Yong-Kuk Jeong

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Career

Mar. 2018 - now	Research Institute of Marine Systems Engineering, Seoul National University (SNU), Seoul, Rep. of Korea <ul style="list-style-type: none">• Postdoctoral Researcher
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Education

Sep. 2011 - Feb. 2018	Seoul National University (SNU), Seoul, Rep. of Korea <ul style="list-style-type: none">• Ph.D. in Engineering (Major: Naval Architecture and Ocean Engineering)• Adviser: Prof. Jong Gye Shin
Mar. 2007 - Feb. 2011	Seoul National University (SNU), Seoul, Rep. of Korea <ul style="list-style-type: none">• B.S. degree, GPA 3.57/4.30 (Major: Naval Architecture and Ocean Engineering, Department of Naval Architecture and Ocean Engineering)

Research Interests

Research Areas	Shipyard Logistics Simulation Ship Production Management Discrete Event System Simulation Life Cycle Assessment Combinatorial Optimization Algorithm
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Research Papers (♦: Ph.D. Dissertation Essays)

- **Yong-Kuk Jeong**, Youngmin Kim, Su Heon Ju, Jong-Gye Shin, Jong-Choel Kim and Jong Hun Woo, (Submitted), Development of an optimization program for spatial layout considering the vulnerability of a naval vessel, **Under 2nd round review at *Journal of Ship Production and Design*.**
- Jong Moo Lee, **Yong-Kuk Jeong**, and Jong Hun Woo, (2018), Development of an Evaluation Framework of Production Planning for the Shipbuilding Industry, *International Journal of Computer Integrated Manufacturing* (Published Online).
- Youngmin Kim, Jong Hun Woo, **Yong-Kuk Jeong**, Jong-Gye Shin, (2018), Computational Shipyard Dynamics, *Journal of Ship Production and Design* (Published Online).
- ♦ **Yong-Kuk Jeong***, SuHeon Ju, Huiqiang Shen, Dong Kun Lee, Jong Gye Shin, Cheolho Ryu, (2018), An analysis of shipyard spatial arrangement planning problem and a spatial arrangement algorithm considering free space and unplaced block, *International Journal of Advanced Manufacturing Technology* (Published Online). (*Corresponding Author)
- ♦ **Yong-Kuk Jeong**, Philippe Lee, and Jong Hun Woo, (2017), Shipyard Block Logistics Simulation Using Process-centric Discrete Event Simulation Method, *Journal of Ship Production and Design*, 33(3), pp. 1-12.
- Jong Hun Woo, Youngmin Kim, **Yong-Kuk Jeong**, and Jong-Gye Shin, (2016), A Research on Simulation Framework for the Advancement of Supplying Management Competency, *Journal of Ship Production and Design*, 32(4), pp. 1-20.
- SeungHoon Nam, Dong Kun Lee, **Yong-Kuk Jeong**, Philippe Lee, and Jong-Gye Shin, (2016), Environmental Impact Assessment of Composite Small Craft Manufacturing Using the Work Breakdown Structure, *International Journal of Precision Engineering and Manufacturing-Green Technology*, 3(3), pp. 261-272.
- Dong Kun Lee, **Yong-Kuk Jeong**, Jong Gye Shin, and Dae-Kyun Oh, (2014), Optimized Design of Electric Propulsion System for Small Crafts using the Differential Evolution Algorithm, *International Journal of Precision Engineering and Manufacturing-Green Technology*, 1(3), pp. 229-240.
- DongKun Lee, YoungMin Kim, **YongKuk Jeong**, and Jong Gye Shin, (2014), Simulation-based Work Plan Verification in Shipyards, *Journal of Ship Production and Design*, 30(1), pp. 1-9.

Conference Proceedings (the name of the presenter is underlined)

- **Yong-Kuk Jeong**, Hui-Qiang Shen, SeungHoon Nam, Youngmin Kim, Jong-Gye Shin, Philippe Lee, Jae Ho Choi, and Jong Hun Woo, (2017), Verification and Validation of Shipyard Logistics Simulation System and Its Use Case Identification, *WSC 2017*, Las Vegas, NV, 3-6 December, 2017.
- Hui-Qiang Shen, **Yong-Kuk Jeong**, Seung-Hoon Nam, Youngmin Kim, Jong-Gye Shin, Dong Kun Lee, and Daekyun Oh, (2017), A Hierarchical Simulation Model for Workload Analysis of Ship Block Erection Process, *WSC 2017*, Las Vegas, NV, 3-6 December, 2017.
- Su Heon Ju, **Yong-Kuk Jeong**, Seunghyeok Son, Young Gi Min, Jong-Gye, Shin, JongChul Kim, Jong Hun Woo, and Philippe Lee, (2017), A layout design framework considering relations between internal space and external shape of naval vessels at the conceptual design, *ISOPE 2017*, San Francisco, CA, June 25–30, 2017.
- **Yong-Kuk Jeong**, Seung Hoon Nam, Youngmin Kim, Jong-Gye Shin, Young-Ki Min, Jong Hun Woo, Jae-Ho Choi, Sang-Hoon Kim, and Dae-Kyun Oh, (2017), A modeling and simulation method for multi-layered supply chain management in shipbuilding industries, *ACM SIGSIM PADS 2017*, NTU Singapore, 24-26 May, 2017.
- Byeongseop Kim, **Yong-Kuk Jeong**, Seunghyeok Son, Philippe Lee, Yonggil Lee, and Jong Hun Woo, (2017), The Extended Process-Centric Modeling Method for Logistics Simulation in Shipyards Considering Stock Areas, *COMPIT 2017*, Cardiff UK, 15-17 May, 2017.
- **Yong-Kuk Jeong**, Byeong-Seop Kim, Jong-Gye Shin, Philippe Lee, Jong Hun Woo, and Jong Moo Lee, (2016), A Ship Block Logistics Support System based on the Shipyard Simulation Framework, *WSC 2016*, Arlington VA, 11-14 December, 2016.
- Seung-hyeok Son, Youngmin Kim, Inhyuck Hwang, Hui Giang Shen, **Yong-Kuk Jeong**, Cheolho Ryu, Jong-Gye Shin, (2015), Design and Development of Manufacturing Information Calculation System for Formation of Curved Hull Plates, *MOTSP 2015*, Brela Croatia, 10-12 June, 2015.
- **Yong-Kuk Jeong**, Philippe Lee, SeungHoon Nam, Dong Kun Lee, Jong-Gye Shin, (2015), Development of the Methodology for Environmental Impact of Composite Boats Manufacturing Process, *CIRP LCE 2015*, Sydney Australia, 7-9 April, 2015.
- Jong-Gye Shin, Dong Hyun Ahn, Seung Hoon Nam, and **Yong-Kuk Jeong**, (2014), An Introduction to Small boat PLM Technology, *ICOR 2014*, Fiji, 13-15 October, 2014
- Jong-Gye Shin, Seung Hoon Nam, and **Yong-Kuk JEONG**, (2014), Generic Work Breakdown Structure for Sailing Yacht Lifecycle Management, *ICOR 2014*, Fiji, 13-15 October, 2014.

Research Projects

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| Oct. 2016 -
now | National IT Industry Promotion Agency, Republic of Korea <ul style="list-style-type: none">• Project: Development of manufacturing strategy and execution simulation for shipyard manufacturing cost |
| Oct. 2014 -
now | Ministry of Trade, Industry & Energy, Republic of Korea <ul style="list-style-type: none">• Project: Development of simulation based production management system for middle-sized shipbuilding companies |
| Sep. 2012 -
Dec. 2017 | Ministry of National Defense, Republic of Korea <ul style="list-style-type: none">• Project: Advanced Naval Vessel Research Laboratory |
| June. 2016 -
Nov. 2016 | Daewoo Shipbuilding & Marine Engineering Co., Ltd. (DSME) <ul style="list-style-type: none">• Project: Development of the block arrangement algorithm and module |
| Aug. 2015 -
Nov. 2015 | Daewoo Shipbuilding & Marine Engineering Co., Ltd. (DSME) <ul style="list-style-type: none">• Project: Preliminary research on building digital shipyard framework |

Course-Work Training (Overall GPA: 3.97/4.30)

- Topics in Ship Production Engineering
- Topics in Ship Structural Design
- Simulation-based Manufacturing Systems
- Systems Engineering Management
- Product Lifecycle on Systems Engineering
- Shipyard Layout Planning and Spatial Planning
- Technology Valuation Assessment
- Integer Programs
- Theory of Scheduling
- Managerial Statistics

Awards and Honors

Mar. 2012 - Aug. 2013	STX Foundation
Nov. 2012	Encouragement Award , Korean Institute of Industrial Engineers.
Feb. 2011	The Society of Naval Architects of Korea
Mar. 2007 - Feb. 2011	National Scholarship For Science and Engineering , Korea Student Aid Foundation (KOSAF)

Other Information

Language	<ul style="list-style-type: none">• Korean: native language• English: fluent (speaking, reading), intermediate (writing)
Technical Skills	<ul style="list-style-type: none">• Simulation Analysis: DELMIA QUEST, AnyLogic, Simio• Programming Language: C#, HTML, Python• Proficient in MS-office: Word, Excel, PowerPoint