Curriculum Vitae

|  |
| --- |
| **Yong-Kuk Jeong** |

**Date of Birth**. 7 June 1989  
**Email**. jake8967@snu.ac.kr  
**Telephone**. +82-10-2772-0681  
**Address**. 36-411, Seoul National University  
1 Gwanak-ro, Gwanak-gu, Seoul 08826  
Republic of Korea

|  |  |
| --- | --- |
| **Career** | |
| Mar. 2018 - now | **Research Institute of Marine Systems Engineering, Seoul National University (SNU)**, Seoul, Rep. of Korea |
| * Postdoctoral Associate |

|  |  |
| --- | --- |
| **Education** | |
| Sep. 2011 - Feb. 2018 | **Seoul National University (SNU)**, Seoul, Rep. of Korea |
| * 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 |
| * 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 |

|  |
| --- |
| **Research Papers** (🞟: Ph.D. Dissertation Essays) |
| * **Yong-Kuk Jeong**, Youngmin Kim, Su Heon Ju, Jong-Gye Shin, Jong-Choel Kim and Jong Hun Woo, (2018), Development of an optimization program for spatial layout considering the vulnerability of a naval vessel, ***Journal of Ship Production and Design*** (Published Online). * 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***, 95, pp. 4307-4325. (\*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) |
| * Jong Hun Woo, Jaeho Choi, Ji Hye Kim, **Yong-Kuk Jeong**, Philippe Lee, and Jong Ho Nam, (2018), Machine Learning in Ship Production, ***COMPIT 2018***, Pavone, Italy, 14-16 May, 2018. * **Yong-Kuk Jeong**, Jong Hun Woo, Philippe Lee, Youngmin Kim, Young-Ki Min, Jong Gye Shin, Yong Gil Lee, and Cheolho Ryu, (2018), Shipyard DES Simulation Framework and its Applications, ***COMPIT 2018***, Pavone, Italy, 14-16 May, 2018. * **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-hyoek 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** | |
| Oct. 2016 - now | **National IT Industry Promotion Agency, Republic of Korea** |
| * Project name: Manufacturing strategy and execution simulation system to quantify shipbuilding manufacturing cost |
| Oct. 2014 - now | **Ministry of Trade, Industry & Energy, Republic of Korea** |
| * Project name: Simulation based production management system for middle-sized shipbuilding companies |
| Sep. 2012 - Dec. 2017 | **Ministry of National Defense, Republic of Korea** |
| * Project name: Advanced Naval Vessel Research Laboratory (Study on the spatial layout algorithm considering the survivability of a naval vessel) |
| Jun. 2016 - Nov. 2016 | **Daewoo Shipbuilding & Marine Engineering Co., Ltd. (DSME)** |
| * Project name: Development of the spatial block arrangement algorithm |
| Aug. 2015 - Nov. 2015 | **Daewoo Shipbuilding & Marine Engineering Co., Ltd. (DSME)** |
| * Project name: Study on the simulation framework for digital shipyards |
| Jun. 2011 - May. 2015 | **Ministry of Knowledge Economy, Republic of Korea** |
| * Project name: Development of the integrated engineering management system and main parts for 20ft~40ft class sailing yachts |

|  |
| --- |
| **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 | * **Korean**: native language * **English**: fluent (speaking, reading), intermediate (writing) |
| Technical Skills | * **Simulation Analysis:** DELMIA QUEST, AnyLogic, Simio * **Programming Language:** C#, HTML, Python * **Proficient in MS-office:** Word, Excel, PowerPoint |

|  |
| --- |
| **References** |
| **Dr. Shin, Jong Gye**  Professor of Seoul National University, Seoul, Rep. of Korea  Email: [jgshin@snu.ac.kr](mailto:jgshin@snu.ac.kr)  Phone: (+82)-2-880-7129 |
| **Dr. Woo, Jong Hun**  Professor of Korea Maritime and Ocean University, Busan, Rep. of Korea  Email: [jonghun\_woo@kmou.ac.kr](mailto:jonghun_woo@kmou.ac.kr)  Phone: (+82)-51-410-4304 |