**A picture containing human face, person, chin, neck

Description automatically generatedYongkuk Jeong, PhD**

Assistant Professor in Sustainable Production Logistics

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| **Work Experience** | |
| **KTH Royal Institute of Technology, Sweden**  Department of Production Engineering, Assistant Professor | Jan 2021 – Present |
| **KTH Royal Institute of Technology, Sweden**  Department of Sustainable Production Development, Postdoc | Jan 2019 – Jan 2021 |
| **Inha Technical College, South Korea**  Department of Naval Architecture and Marine Engineering, Lecturer | Mar 2018 – Dec 2018 |
| **Seoul National University, South Korea**  Research Institute of Marine Systems Engineering, Postdoc | Mar 2018 – Jan 2019 |

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| **Education** | |
| **Seoul National University, South Korea**  Doctor of Philosophy in Naval Architecture and Ocean Engineering   * *Thesis title: A shipyard logistics simulation system considering shipbuilding process, spatial arrangement, and logistics flow* | Sep 2011 – Feb 2018 |
| **Seoul National University, South Korea**  Bachelor of Science in Naval Architecture and Ocean Engineering   * Graduated as valedictorian in the program | Mar 2007 – Feb 2011 |

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| **Selected Publications** |
| **[1] Enabling Industrial Internet of Things-based Digital Servitization in Smart Production Logistics.**   * Erik Flores-García, *Yongkuk Jeong*, Sichao Liu, Magnus Wiktorsson, and Lihui Wang (2022). * International Journal of Production Research, 61(12). |
| **[2] Spatial Arrangement using Deep Reinforcement Learning to Minimise Rearrangement in Ship Block Stockyards.**   * Byeongseop Kim, *Yongkuk Jeong*, and Jong Gye Shin (2020). * International Journal of Production Research, 58(16). |
| **[3] A Spatial Layout Optimization Program considering the Survivability of a Naval Vessel in the Early Design Stage.**   * *Yong-Kuk Jeong*, Youngmin Kim, Su Heon Ju, Jong-Gye Shin, Jong-Choel Kim, and Jong Hun Woo (2019). * Journal of Ship Production and Design, 35(2). |
| **[4] An Analysis of Shipyard Spatial Arrangement Planning Problem and a Spatial Arrangement Algorithm considering Free Space and Unplaced Block.**   * *Yong-Kuk Jeong*, SuHeon Ju, Huiqiang Shen, Dong Kun Lee, Jong Gye Shin, and Cheolho Ryu (2018). * International Journal of Advanced Manufacturing Technology, 95. |
| **[5] Shipyard Block Logistics Simulation Using Process-centric Discrete Event Simulation Method.**   * *Yong-Kuk Jeong*, Philippe Lee, and Jong Hun Woo (2018) * Journal of Ship Production and Design, 34(2). |
| More publications are available in Google Scholar profile ([link](https://scholar.google.com/citations?user=y59QYYIAAAAJ&hl=en)) and my personal website ([link](https://jeongyk89.github.io/)) |

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| **Selected Research Projects** | |
| **SHIFT-DT**  Sustainable, Holistic, Integrated Framework for Ship Design and Production Transformation through Digital Twins   * Funded by Digital Futures (Swedish Funding Agency) * Leading the project as a Principal Investigator (PI) to establish a framework that can marry holistic ship design with digitalized ship production and logistics through digital twins | Jan 2024 – Dec 2025 |
| **Dynamic SALSA**  Dynamic scheduling of assembly and logistics system using AI   * Funded by Eureka SMART and Vinnova (Swedish Innovation Agency) * Building a computer vision-based platform for analyzing human operators and objects in a production logistics environment | Apr 2023 – Mar 2026 |
| **TIMEBLY**  Time data management automation for manual assembly   * Funded by Vinnova * Leading the human pose estimation and time series prediction analysis for manual assembly tasks using open-source libraries | Nov 2021 – Oct 2024 |
| **DYNASTEEL**  Dynamic scheduling and transport visibility in steel production   * Funded by Vinnova * Involved in human-centered system design process for autonomous transportation system including requirements analysis and prototyping | Mar 2022 – Dec 2022 |
| **C-PALS**  Cyber-physical assembly and logistics system   * Funded by Eureka SMART and Vinnova * Built a digital twin and real-time production logistics data visualization platform using open-source libraries | May 2019 – Aug 2022 |
| **HUPMOBILE**  Holistic urban and per-urban mobility   * Funded by Interreg Baltic Sea Region (EU) * Involved in participatory modelling and simulation process for urban mobility simulation with multiple stakeholders | Jan 2019 – Dec 2021 |
| **Simulation system for manufacturing strategy and execution to quantify ship production cost**   * Funded by National IT Industry Promotion Agency of Korea * Developed and implied a simulation-based monitoring system for ship production process | Oct 2016 – Jan 2019 |
| **Simulation-based production planning and management system for middle-sized shipbuilding companies**   * Funded by Ministry of Trade, Industry, and Energy of Korea * Developed and implied an advanced planning and control system for ship production process | Oct 2014 – Jan 2019 |
| **Advanced Naval Vessel Research Laboratory**   * Funded by Ministry of National Defense of Korea * Developed an optimization algorithm for spatial layout design of naval vessels considering the survivability | Sep 2012 – Dec 2017 |

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| **Teaching Experience** | |
| **KTH ML2302: Modelling, Simulation and Optimization of Sustainable Production**  Course responsible and teacher | 2020 – Present |
| **KTH ML2303: Digitalisation for Sustainable Production**  Course responsible and teacher | 2020 – Present |
| **KTH ML2307: Theory of Science and Research Methodology in Sustainable Production Development**  Course responsible and teacher | 2022 – Present |
| **KTH ML2305: Production Logistics and Supply Chains**  Teacher | 2022 – Present |
| **KTH ML2308: CDIO course in Sustainable Production Development**  Guest lecture in visualization and communication | 2020 – Present |
| **KTH ML230X: Degree Project in Sustainable Production Development, Second Cycle**  Supervisor | 2020 – Present |
| **KTH ML1503: Industrial Systems II**  Guest lecture in Industry 4.0 | 2020 – Present |
| **KTH ML1505: Industrial Systems III**  Guest lecture in Operator and Industry 4.0 | 2020 – Present |
| **Ingenjör4.0 - Upskilling for future manufacturing**  Course responsible for Autonomous Robots and Cyber-Physical Systems | 2023 – Present |
| **EIT Urban Mobility Lifelong Learning in New Trends on Urban Mobility**  Teacher | 2022 |
| **InhaTech: Ship Production Design**  Course responsible and teacher | 2018 |
| **InhaTech: Introduction of Ship Production Engineering**  Course responsible and teacher | 2018 |
| **SNU: Introduction to Production Automation**  Teaching assistant | 2011 – 2015 |
| **SNU: Introduction of Ship Production System**  Teaching assistant | 2011 –2015 |

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| **Skills** |
| * **Project management**: led and successfully delivered various research and development projects |
| * **Programming skills**: C#, Python, JavaScript, Java, SQL, HTML, and UML |
| * **Language**: English (fluent), Korean (fluent), Swedish (working knowledge) |

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| **Other** |
| * **Winner of the Elmer L. Hann Award** for best paper on Ship Production delivered at a Society of Naval Architects and Marine Engineers (SNAME) event in 2019 for the paper "Model-based Computational Shipyard Dynamics and its Applications" |
| * **Reviewed papers** for various journals and conferences including: * International Journal of Computer Integrated Manufacturing (IJCIM) * International Journal of Production Research (IJPR) * Ships and Offshore Structures * Automation in Construction * Journal of Engineering for the Maritime Environment (JEME) * International Journal of Naval Architecture and Ocean Engineering (IJNAOE) * Journal of Ship Production and Design (JSPD) * International Journal of Precision Engineering and Manufacturing-Green Technology (IJPEM-GT) * IFIP International Conference on Advances in Production Management Systems (APMS) * Winter Simulation Conference (WSC) * European Operations Management Association (EurOMA) annual conference |
| * **Editorial board member** in * International Journal of Sustainable Engineering * International Journal of Precision Engineering and Manufacturing – Smart Technology |
| * **Member** of EurOMA and **life member** of the Society of Naval Architects of Korea |