

Yongkuk Jeong, PhD

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Employment

- **Assistant Professor**, Department of Production Engineering, KTH Royal Institute of Technology, Sweden, 2021-now
- **Postdoc**, Department of Sustainable Production Development, KTH Royal Institute of Technology, Sweden, 2019-2021
- **Postdoctoral Researcher**, Research Institute of Marine Systems Engineering, Seoul National University, South Korea, 2018-2019

Education

- **Ph.D.**, Department of Naval Architecture and Ocean Engineering, Seoul National University, South Korea, 2018 (Thesis title: A shipyard logistics simulation system considering shipbuilding process, spatial arrangement, and logistics flow – *developed .NET framework-based C# simulation applications from scratch*)
- **B.Sc.**, Department of Naval Architecture and Ocean Engineering, Seoul National University, South Korea, 2011

Research grants and projects (selected)

- (ongoing) Dynamic SALSA – Dynamic Scheduling of Assembly and Logistics Systems using AI (Eureka SMART) – *building an AI-based image analysis platform for warehouse management*
- (ongoing) TIMEBLY – Time Data Management Automation for Manual Assembly (Vinnova) – *leading the human pose estimation and time series prediction project using open-source Python libraries*
- DYNASTEEL – Dynamic scheduling and transport visibility in steel production (Vinnova) – *involved in system design process including requirements analysis and prototyping*
- C-PALS – Cyber-Physical Assembly and Logistics System (Eureka SMART) - *built a real-time production logistics data visualization platform using Node-RED, Apache Kafka, MariaDB, and Grafana*
- HUPMOBILE – Holistic Urban and Peri-urban Mobility (Interreg Baltic Sea Region, European Union) – *involved in participatory modeling process for multiple stakeholders*

Publications (selected)

- Erik Flores-García, Yongkuk Jeong, Sichao Liu, Magnus Wiktorsson, and Lihui Wang (2022), Enabling Industrial Internet of Things-based Digital Servitization in Smart Production Logistics, IJPR.
- Jong Hun Woo, Haoyu Zhu, Dong Kun Lee, Hyun Chung, and Yongkuk Jeong (2021), Assessment Framework of Smart Shipyard Maturity Level via Data Envelopment Analysis, Sustainability, 13(4)
- Byeongseop Kim, Yongkuk Jeong, and Jong Gye Shin, (2020), Spatial arrangement using deep reinforcement learning to minimise rearrangement in ship block stockyards, IJRP, 58(16), pp. 5062-5076
- Yong-Kuk Jeong, SuHeon Ju, Huiqiang Shen, Dong Kun Lee, Jong Gye Shin, and Cheolho Ryu, (2018), An analysis of shipyard spatial arrangement planning problem and a spatial arrangement algorithm considering free space and unplaced block, IJAMT, 95, pp. 4307–4325
- Yong-Kuk Jeong, Philippe Lee, and Jong Hun Woo, (2018), Shipyard Block Logistics Simulation Using Process-centric Discrete Event Simulation Method, JSPD, 34(2), pp. 168-179

Skills

- Project management: participated in and led various IT development projects for manufacturing companies.
- Programming skills: C#, Python, JavaScript, SQL
- Language: English, Korean (fluent), Swedish (basic)

Others

- Reviewed papers from various journals and conferences including IJCIM, IJPR, Ships and Offshore Structures, Automation in Construction, IJNAOE, JSPD, IJPEM-GT, APMS, WSC, EuOMA, and SPS
- Editor in International Journal of Sustainable Engineering and International Journal of Precision Engineering and Manufacturing – Smart Technology