

# Yoonsik Jung

Direct Ph.D Student

Korea University

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<https://yoonsik-jung-opt.github.io/>

## EDUCATION

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Mar. 2021 ~ Present	<b>Korea University</b> School of Industrial Management Engineering <i>Integrated Master and Ph.D. Course</i>  <i>Advisor: Hongseo Ryoo</i>  <i>Ph.D. Student</i>	Seoul, Korea
Mar. 2014 ~ Feb. 2020	<b>Dongguk University</b> Department of Industrial and Systems Engineering  <i>B.S. in Industrial and Systems Engineering</i>	Seoul, Korea

## RESEARCH INTERESTS

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- Operations research
- Mathematical optimization
- Smart manufacturing

## CONFERENCES

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1. **Yoonsik Jung**, Jeongin Koo, "A Scheduling Algorithm for Reducing Long-Term Work-In-Process Inventory in Battery Formation Process", The 26th Winter Conference of Society for Computational Design and Engineering, Jeju, Korea(2020) - Oral
2. **Yoonsik Jung**, Mingi Kang, Jeongin Koo, "A Study on the Tool Wear Estimation Using Discrete Wavelet Transformation and LSTM Networks", KSMPE 2020 Spring Conference, Pyungchang, Korea(2020) - Poster
3. **Yoonsik Jung**, Jeongin Koo, "A Development on the Scheduling Algorithm for Automated Logistics in Battery Formation Production", The 25th Winter Conference of Society for Computational Design and Engineering, Pyungchang, Korea(2020) - Poster
4. Dongwoo Kang, Sunung Kim, **Yoonsik Jung**, Hongseo Ryoo, "Generating Interpretable Patterns for Biomedical Image Classification", 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), Virtual (Dec. 2021) - Poster
5. Jeongin Koo, **Yoonsik Jung**, Chanyong Kim, Dongil Kim, "A Study on the Toolwear Estimation Model based on the Machine Learning", KSPE 2019 Fall Conference, Changwon, Korea(2019) - Oral

6. Sun Kim, Hanjun Kwon, Yoonsik Jung, Jeongin Koo, "Design and Implementation of Machining Process Data preprocessing System", KSMTE Spring Conference 2020, Pyungchang, Korea(2020)  
- Poster

## RESEARCH EXPERIENCES

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- Researcher at Manufacturing Process Platform R&D Department, Korea Institute of Industrial Technology, Korea (Jul. 2019 ~ Dec. 2020)

## AWARDS AND HONORS

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- 3rd Prize, Matlab AI Student Challenge, The MahtWorks Korea, Korea (Oct. 2021)
- Award of Merit, Industrial Engineering Project Competition, Korean Institute of Industrial Engineers, Korea (Nov. 2019)
- Award of Distinction, Computer Simulation Competition, The Korea Society for Simulation, Korea (Apr. 2019)
- Award of Merit, Ergonomics Capstone Design Award, Ergonomic Society of Korea, Korea (Nov. 2018)

## PROJECTS

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- Simulation and Optimization of Logistics Operation of Big Data Base Manufacturing Line, Ministry of Trade, Industry & Energy, Korea, Korea (Jul. 2019 ~ Dec. 2020)
- Machinability Diagnosis and Control System based on Deep Learning for Selfoptimized Manufacturing System, Korea Institute of Industrial Technology, Korea (Jul. 2019 ~ Dec. 2020)

## SKILLS AND TECHNIQUES

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- Programming Languages : C++, Python, Java, R, SQL, Shell Script
- Optimization Tools: Gurobi