# Yoonsik Jung

Direct Ph.D Student
Korea University
551 Engineering Building, 145 Anam-Ro, Seongbuk-Gu, Seoul, 02841, Republic of Korea.
ys\_jung@korea.ac.kr
+82) 10-8619-5449
https://yoonsik-jung-opt.github.io/

#### **EDUCATION**

Mar. 2021 ~ Present	Korea University School of Industrial Management Engineering  Advisor: Hong Seo Ryoo	Seoul, Korea
Mar. 2014 ~ Feb. 2020	Ph.D. Student  Dongguk University  Department of Industrial and Systems Engineering  B.S. in Industrial and Systems Engineering	Seoul, Korea

#### **RESEARCH INTERESTS**

- Operations research
- Mathematical optimization
- Smart manufacturing

# **CONFERENCE PAPERS**

 Dongwoo Kang, Sunung Kim, <u>Yoonsik Jung</u>, Hong Seo Ryoo, "Generating Interpretable Patterns for Biomedical Image Classification", 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), Virtual (Dec. 2021)

## **CONFERENCES**

- 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)
- 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)
- 3. Sun Kim, Hanjun Kwon, <u>Yoonsik Jung</u>, Jeongin Koo, "Design and Implementation of Machining Process Data preprocessing System", KSMTE Spring Conference 2020, Pyungchang, Korea(2020)
- 4. **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)
- 5. Jeongin Koo, <u>Yoonsik Jung</u>, Chanyong Kim, Dongil Kim, "A Study on the Toolwear Estimation Model based on the Machine Learning", KSPE 2019 Fall Conference, Changwon, Korea(2019)

## **RESEARCH EXPERIENCES**

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

#### **AWARDS AND HONORS**

- 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**

- Simulation and Optimization of Logistics Operation of Big Data Base Manufacturing Line, Ministry of Trade, Industry and Energy, 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)
- Development of manufacturing big data collection and analytics general purpose platform,
   Ministry of Trade, Industry and Energy, Korea (Mar. 2020 ~ Aug. 2020)
- A Development on the Integrated Management System of Small and Medium Retail Stores for Service Productivity Innovation, Ministry of Trade, Industry and Energy, Korea (Aug. 2020 ~ Dec. 2020)

# **TEACHING EXPERIENCES**

## Teaching Assistant(TA)

- Operations Research I, II (Fall 2021, Spring 2022, Fall 2022)
- Production Planning (Spring 2021)
- Introduction to Programming (Winter 2018, Spring 2019)

# **SKILLS AND TECHNIQUES**

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