

**Tenure Track Faculty Position Announcement**  
**by**  
**Graduate School of Data Science (GSDS)**  
**and Industrial & Systems Engineering Department (ISysE)**  
**of KAIST**

Sep. 25~ Oct. 31, 2023

**Graduate School of Data Science (GSDS)** and **Department of Industrial & Systems Engineering (ISysE)** at **KAIST**<sup>a</sup> invites applications for **tenure-track faculty positions at the levels of Assistant/Associate/ Full Professor**. KAIST GSDS<sup>b</sup> is a recently established graduate (MS and PhD) program, prepared by a joint team of KAIST faculty with the lead of ISysE department<sup>b</sup>.

We are actively seeking candidates who are truly interested in building a strong graduate program on data science, defining the future of manufacturing/service industries and/or the human-centric engineering field. In this term of recruit, we would like to invite the following areas:

- **Mathematical and computational techniques for modeling and analysis**
  - ✓ statistics, AI, machine learning
  - ✓ optimization (continuous or discrete/combinatorial)
  - ✓ probabilistic / stochastic model
  - ✓ simulation (modeling, implementation, analysis)
  
- **Human-centric engineering**
  - ✓ collaboration between human and AI/robots, human-integrated systems
  - ✓ human-computer interaction, human-machine interaction, data/information visualization
  - ✓ human factors, ergonomics in physical & cyber environment
  - ✓ data-driven human behavior modeling and human-data interaction
  - ✓ cognitive science in decision making, behavioral OR/OM
  - ✓ application of human-centric engineering in industrial or social problems in such areas as manufacturing, financial services, medical and healthcare services, legal services, public services, etc.
  - ✓ other emerging field relevant to human-centric engineering

- **Manufacturing systems engineering**

- ✓ manufacturing systems for 2050: beyond lean production
- ✓ production and operations management for autonomous production system
- ✓ key enabling technology components for smart factory
  - \* digital twin and virtual manufacturing
  - \* human-machine collaboration, AR/VR/MR
  - \* intelligent quality control
  - \* advanced logistics
- ✓ human-centric manufacturing
  - \* digital twin and virtual manufacturing
- ✓ Applications-oriented research in key industry sectors incl. semiconductor, automotive, shipbuilding, etc.
- ✓ Other emerging fields relevant to next generation manufacturing system

- **Applications-oriented decision science to solve industrial or social problems**

- ✓ healthcare analytics, financial engineering, business analytics for societal problems
- ✓ decision making under uncertainty in various applications

Industrial or academic experience will be considered preferably, and students who are expected to complete their PhDs within 9 months from the application date will also be considered. Application documents (of official form) along with an up-to-date CV and (up to 3) representative papers should be sent to:

**Professor Taesik Lee (Hiring committee)**

**Department of Industrial & Systems Engineering, KAIST**

**Email: [taesik.lee@kaist.ac.kr](mailto:taesik.lee@kaist.ac.kr)**

Applications are considered on a rolling basis until the positions are filled, and are reviewed in a monthly batch. We strongly recommend applying at your earliest convenience.

If you have further inquiries regarding this faculty position announcement such as targeting areas, you may contact Prof. Taesik Lee at [taesik.lee@kaist.ac.kr](mailto:taesik.lee@kaist.ac.kr).

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<sup>a</sup> KAIST (Korea Advanced Institute of Science and Technology) is a globally renowned science and technology institution, particularly well known for its excellence in engineering and technology. The institute is

dedicated to promoting a vibrant academic culture and offers an internationally-minded environment through ways such as teaching all courses in English. You can find more about KAIST at <http://kaist.ac.kr>

<sup>b</sup> For general information about the Department of Industrial & Systems Engineering at KAIST, please visit <http://ise.kaist.ac.kr> and also <http://gsds.kaist.ac.kr>