

# Introduction to Programs

## ■ Goals of the KAIST GSAI Academic Program

- Provide education on machine learning and core AI technologies by faculty with world class research achievements
- Offer flexible curriculum based on the individual student's future goals
- Effective and efficient studies to foster global leadership in core AI fields

## ■ Degree Programs at KAIST GSAI: Master of Engineering, Doctor of Engineering

- Master's Degree Program, MS-Ph.D. Integrated Program, Master of Entrepreneurship and Innovation, Doctoral Degree Program

## ■ Characteristics of the KAIST GSAI Curriculum

- Our MS and PhD degree programs aim to (1) build a foundation for understanding and applying AI technologies, (2) foster an understanding of state-of-the-art technology to encourage cutting-edge AI research, and (3) develop expertise that leads to innovation in various industrial fields by our students. For our first goal, we provide courses on core subjects including mathematics for AI, programming, optimization, machine learning, deep learning, reinforcement learning, and data mining. For our second goal, we provide advanced courses in AI including advanced machine learning, advanced deep learning, advanced reinforcement learning, time series analysis, and machine learning theory. For our third goal, we provide courses in AI application including machine learning for healthcare, natural language processing, recommender systems, social network analysis, interpretability and interactivity in AI, and systems of artificial intelligence and machine learning. In addition, research forms the core of our MS and PhD degree programs, with cutting-edge AI research performed with international collaboration and industry-academia cooperation, and the outcomes being presented in top-tier journal publications and conference presentations.

