

Special Topics in Mechano-InformaticsII  
Wednesday 15:10-16:40

**- Course Objectives/Overview**

The goal of this course is to provide advanced topics in the field of Machine Learning, Artificial Intelligence, and Big Data. All lecturers are members of RIKEN Center for Advanced Intelligence Project (AIP).

**- Keywords**

Machine Learning, Artificial Intelligence, Big Data

**- Teaching Methods**

On-line lecture via zoom (the link will be announced in UTAS and ITC-LMS)

**- Method of Evaluation**

Homeworks

Class Participation

**- Schedule**

2022/4/6 Masashi Sugiyama, Overview of AI Research and Introduction of RIKEN-AIP

2022/4/13 Lin Gu, Applying AI in Medical Research

2022/4/20 Jingfeng Zhang, Trustworthy Machine Learning

2022/4/27 Shuhei Kurita, Natural Language Processing and Applications

2022/5/11 Yasuo Tabei, Succinct Data Structure for Scalable Knowledge Discoveries

2022/5/18 Qibin Zhao, Tensor Factorization and Tensor Networks for Machine Learning

2022/5/25 Qibin Zhao, Interpretable and Adversarial Machine Learning

2022/6/8 Tatsuya Harada, Understanding Visual Information Using Machine Learning

2022/6/15 Tomasz Rutkowski, AI and human brain: Brain-computer Interface (BCI)Applications

2022/6/22 Tomasz Rutkowski, AI for Time-series: Healthcare, Multimedia, and VR/AR Applications

2022/6/29 Ha Quang Minh, Geometrical Methods in Machine Learning and Applications I

2022/7/6 Ha Quang Minh, Geometrical Methods in Machine Learning and Applications II

2022/7/13 Stefano Kalonaris, Deep Learning for Music ApplicationsApplications

**- Required Textbook**

non

**- Reference Books**

機械学習プロフェッショナルシリーズ, 講談社

**- Course-Related Websites**

<http://www.riken.jp/en/research/labs/aip/>

**- E-mail Address**

lec-fai2@ai.u-tokyo.ac.jp