

Special Topics in Mechano-Informatics II

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

2021/04/07 Masashi Sugiyama: Overview of AI Research and Introduction of RIKEN-AIP

2021/04/14 Qibin Zhao: Tensor Factorization and Tensor Networks for Machine Learning

2021/04/21 Qibin Zhao: Interpretable and Adversarial Machine Learning

2021/04/28 Tatsuya Harada: Understanding Visual Information Using Machine Learning

2021/05/12 Pierre Alquier: Basics of Online Optimization

2021/05/19 Pierre Alquier: Online Prediction with Expert Advice

2021/05/26 Lin Gu: Applying AI in Medical Research

2021/06/02 Minh Ha Quang: Geometrical Methods in Machine Learning and Applications I

2021/06/09 Minh Ha Quang: Geometrical Methods in Machine Learning and Applications II

2021/06/16 Yasuo Tabei: Succinct Data Structure for Scalable Knowledge Discoveries

2021/06/23 Tomasz Rutkowski: AI and human brain: Brain-computer Interface (BCI)

Applications

2021/06/30 Tomasz Rutkowski: AI for Time-series: Healthcare, Multimedia VR/AR, and FinTech Applications

2021/07/07 Kentaro Inui: Natural Language Understanding and Assessment

2021/07/14 reserved

- 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