

# Waseda University - Academia Sinica Data Science Workshop

Online

Day

**Dec. 12**, 2020

Time

**13:00 ~ 17:35** (JST)

We are pleased to invite you to the online Data Science Workshop! We will offer lectures from world-class statisticians and experts in information theory. Each lecture has a tutorial and an advanced portion. Two Data Science students will present on their research as well.

Everyone interested in Statistics or Data Science is welcome to join us virtually. The presentation materials will be available online 1 week in advance. We are delighted to have your questions!

We look forward to extending you a warm welcome!

世界トップレベルの統計学者と情報理論の専門家によるデータ科学のワークショップを、オンラインにて開催いたします。各講義が、初心者向け～上級者向けの内容で構成されています。また、データ科学分野の学生の研究発表も行います。

どなたでも大歓迎ですので、ぜひこの機会にデータ科学を学んでみませんか。お申込みいただいた方にはワークショップの約1週間前から資料を公開しますので、事前にご確認いただき、ご質問がございましたらぜひ当日お聞かせください。

皆様のご参加をお待ちしております。

## Registration

- For registration, visit <https://bit.ly/2IlkP93>
- Deadline is **12:00 on Dec. 11** (JST)



Organizers

Center for Data Science, Waseda University [ <https://www.waseda.jp/inst/cds/> ]  
Development of Data Analysis Talents (D-DATa) [ <https://d-data.jp/> ]

# Program

【Moderators】

Associate Professor **Xiaoling Dou**  
Center for Data Science, Waseda University  
Research Fellow **Su-Yun Huang**  
Institute of Statistical Science, Academia Sinica

13:00  
~13:05

## Opening Remarks

**Director Chun-houh Chen** (Institute of Statistical Science, Academia Sinica)

13:05  
~14:15

## Session I

### Computational EEG Analysis for Characterizing Cognitive Activity: Methods and Applications

**Dr. Chih-Hsin Tsai** (Academia Sinica)



### An Attention Algorithm for Solving Large Scale Structured L<sub>0</sub>-norm Penalty Estimation Problems

**Dr. Tso-Jung Yen** (Academia Sinica)



14:20  
~15:30

## Session II

### Bayes Optimal Estimation of Intervention Effects and its Approximation

**Associate Professor Shunsuke Horii** (Waseda University)



### Statistical Models for Image Processing: Hierarchical Representation of Global and Local Structures of Images

**Assistant Professor Yuta Nakahara** (Waseda University)



15:35  
~16:45

## Session III

### Nonparametric Variable Selection via Sufficient Dimension Reduction for Cross-sectional Survival Data Without Follow-up

**Dr. Ming-Yueh Huang** (Academia Sinica)



### Dimension Reduction Method for Noisy High-dimensional Images and Application to Cryogenic Electron Microscopy

**Dr. Szu-Chi Chung** (Academia Sinica)



16:50  
~17:30

## Session IV (Student Session)

### A Proposal of Improved Latent LSTM Allocation Model to Learn Browsing History Data of Flower EC Site

**Ms. Zhiying Zhang** (Waseda University)

### Construction of Demand Forecast Model of Tokyo Taxi Based on Probe Data Analysis

**Mr. Reo Iizuka** (Waseda University)

17:30  
~17:35

## Closing Remarks

**Director Toshiyasu Matsushima** (Center for Data Science, Waseda University)

# Inquiries

Center for Data Science, Waseda University  
cds-info@list.waseda.jp



CDS

Waseda University  
Center for Data Science