3nd International Workshop on Big Data for Sustainable Development

2017 IEEE International Conference on Big Data
Dec 11 – 14, 2017 @ Boston, USA
http://cci.drexel.edu/bigdata/bigdata2017/

INTRODUCTION

Sustainability is an important issue in the modern world. The human society needs to regard the potentials of sustainability from a global perspective. World leaders have adopted the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development at the UN historic Summit in September 2015. Presently, it cannot be said that the definition of sustainability is complete. However, it can be expected that evaluating the current risk of socioeconomic systems, foreseeing any future risks and implementing resilience into the systems may build a sustainable society.

To do so, it seems necessary to understand the state of socioeconomic systems (nowcast) from evidence and to possess design concepts regarding future (foresee). Currently, we have rich data on socioeconomic–environmental systems due to the development of information and communication technology. For example, we have rich data on demography with geographical information, point–to–point data on transportation statistics, and economic activities from e–commerce platforms and electronic exchanges. It is expected that we will be able to understand our socioeconomic l activities and find room for improvement. In order to do so, we have several challenges. Firstly, we need to construct a rich database on socio–economic–environmental systems. Secondly, we need computational methodologies to infer measures of activities and risks from a statistical point of view, since the data is always incomplete. Thirdly, we need novel technologies to societal problems. Fourthly, we need to consider methods to implement these technologies. Novel technologies may seem disruptive, as they interfere with and challenge the status quo. However, it is the status quo that challenges sustainability and calls for unconventional solutions.

In this workshop, we intend to share visions to investigate socio–techno–environmental systems based on rich data with researchers and exchange new ideas based on current state–of–the–arts. In this workshop, we set two goals:

- Mutual understanding of different fields
- Finding opportunities, impacts, and actionable insights for sustainable development from Big Data

Research Topics

- transportation/urban sustainability,
- logistics/sustainable supply chain analytics,
- tourism/ecosystem service/landscape sustainability,
- infrastructure/sustainable water management/climate change adaptation,
- banking and finance/resilient communities
- medical care

Important Dates

June 20, 2017: Announcement (Call for Papers)
Oct 10, 2017: Due date for full workshop papers submission
Nov 1, 2017: Notification of paper acceptance to authors
Nov 15, 2017: Camera-ready of accepted papers
Dec 11-14, 2017: Workshops

Program Chair

- Dr. Aki-Hiro Sato (Kyoto University, Japan)
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- Dr. Antoaneta Serguieva (Systemic Risk Centre, London School of Economics, UK)

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- Dr. Takayuki Mizuno (National Institute of Informatics, Japan)

Workshop Web page

http://ssuopt.amp.i.kyoto-u.ac.jp/wordpress/ieeebigdata2017/