Talk 3 (14:00—14:30)

"Expectations of Data Scientists Towards a Sustainable Society"

Ms. Yoshiko Shirokizawa (Japan Science and Technology Agency)

Ms. Shirokizawa started her presentation by talking about the Sustainable Development Goals (SDGs) adopted by the United Nations member states in 2015, to tackle social issues like poverty, climate change, gender equality, that cannot be solved in isolation.
She highlighted the importance of data in achieving the SDGs goals for two key reasons. Firstly, to make solutions, and secondly, to help identify issues, grasp progress, and make decisions. She noted that given the importance of data, data science and associated technology such as AI has a significant role. But warned that various technical issues need to be addressed, particularly concerning AI.
For example, AI becomes a "black box" where deep learning produces accurate results, but it does not explain understandably explain the underpinning mechanism.
Additionally, there may be bias in the AI process. For example, if the data used in learning includes prejudice, prejudice is reflected in the judgment result.
Finally, AI is subject to vulnerability. For example, it is unknown how AI behaves when faced with unexpected data compared to already learned data. Given the above, Ms. Shirokizawa emphasized that to utilize data in the real world, we need to recognize that AI analysis is the result of AI's recognition of data, including data selection error and measurement error.
Ms. Shirokizawa concluded by saying it is important to interpret the results presented by AI so that they will not lead to prejudice or discrimination and appropriately feed them back to the real world.

Panel Discussion 2 (14:30-15:15)

(Mr. Yoshiko Shirakizawa, Michiko Watanabe, Yoko Ono (moderator))

(SDGs and Data Science) spirited discussion was held on SDGs and data science.
The panelist mentioned that since various data related to SDGs are emerging, it is necessary to establish the following three bases, together with R&D for each domain.

- Base for achieving SDGs.
- Base for strengthening SDGs themselves.
- Base for evaluating the progress in achieving SDGs.

Without data science, SDGs will not progress at all.
The Code of Conduct for Data Scientists was also discussed. It was suggested it is good to have a code of conduct, as it will give everyone a chance to think about various issues related to data science. (Just as drafts are often catalysts for thinking and discussion only after being written).
(Local SDGs) The panelists also emphasized that it is necessary to think about what can be done to help solve social issues in the region and to work from the perspective of how to contribute to them by using science and technology. Until recently, many Japanese thought that the SDGs were mainly for developing countries, but in fact, there are many domains and indicators in which Japanese society is lagging in. So collective action must be taken.

Closing Remarks (15:15)

Ms. Michiko Watanabe (Keio University (Chair, Steering Committee, WiDS TOKYO @ YCU))

Ms. Watanabe mentioned that although the symposium was held as a web conference to avoid the spread of COVID-19, it is by no means an alternative to face-to-face symposia. Instead, it is a new innovative style of meeting, in which more than 100 viewers participated during the entire conference, and where new technology, made real-time comments possible and in turn served as useful discussion points.
Ms. Watanabe said she was strongly inspired by the next new mode of the symposiums, and was proud that WiDS has been one of the early adopters of the new way of transmitting information.
Ms. Watanabe concluded by saying she feels that WiDS activities will gain increased momentum and spread throughout Japan and thanked everyone for their support and participation.

Record of Activities

1	Idea Competition: Idea Challenge 2019	Dec. 2018 - Mar. 2019	
2	1st Symposium, WiDS TOKYO @ Yokohama City University	Mar. 22, 2019	Shinjuku-ku, Tokyo
3	Workshop: SDGs and Data Science	July. 30, 2019	Tokyo Keidanren Kaikan
4	Workshop: Invitation to Data Science	Aug. 7, 2019	YCU, Kanazawa-Hakkei Campus
5	Workshop: The Future of Data Science Education and the Role of WiDS	Sep. 4, 2019	YCU, Kanazawa-Hakkei Campus / Invited Mr. Ms. Judy Logan (Co-Chair of WiDS Project) of Stanford University, USA
6	Workshop: The Future of Data Science and the Role of WiDS	Sep. 5, 2019	Roppongi, Minato-ku, Tokyo / Invited Mr. Ms. Judy Logan (Co-Chair of WiDS Project) of Stanford University, USA
7	Workshop: Invitation to Idea Challenge 2020-Yochy meets Madonna-	Dec. 18, 2019	Tokyo University of Science Kagurazaka Campus
8	Workshop: Let us Think of Ideas for "Working Healthy" from Experiences and Data	Feb. 13, 2020	Shinjuku-ku, Tokyo / Cooperation: Teikoku Databank. Ltd., NTT Data Institute of Management Consulting Ltd.
9	Idea Competition: Idea Challenge 2020	Dec. 2019	December 2019- (suspended in Feb.2020 due to COVID-19) / It resumed on October 16, 2020.
10	2nd Symposium, WiDS TOKYO @ Yokohama City University	Mar. 18, 2020	Minato-ku, Tokyo / Held as a web symposium to prevent COVID-19 infection

WOMEN IN DATA SCIENCE
TOKYO @
YOKOHAMA CITY UNIVERSITY

WiDS
WOMEN IN DATA SCIENCE
TOKYO @
Yokohama City University

Post-Symposium Report

Oct. 2020

https://wids-ycu.jp/

YOKOHAMA
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Annual Report 2019

What is WiDS (Women in Data Science)?

WiDS is a global initiative that originated at Stanford University' s Institute for Computational and Mathematical Engineering (ICME). WiDS aims to inspire, educate, and support data scientists, regardless of gender. At the annual conference at Stanford University and local events around the world, lectures and discussions are held on various topics related to data science such as:

・New applications
・Technical issues and prospects
・How women are contributing to this evolving field.

Inspire
Educate
Support

2nd WiDS TOKYO @ Yokohama City University Symposium

Yokohama City University (YCU) has been active in this global initiative since 2018 when it conducted the first WiDS TOKYO @ Yokohama City University Symposium in collaboration with Stanford University. At WiDS TOKYO @ Yokohama City University Symposium, women active in the field of data science, and those who aspire to play an active role, make presentations, and engage in public debate. The symposium and related events aim to raise awareness and inspire/invite youth, particularly women into the field of data science. The 2nd WiDS TOKYO @ Yokohama City University Symposium was held on March 18th. 2020. Given the COVID-19 restrictions, the conference was conducted online. For more information on the 2nd symposium please see https://wids-ycu.jp.

The symposium was organized by Center for Data Science of Yokohama City University in cooperation with the following organizations;

-Organizers

・Teikoku Databank, Ltd.
・Research Organization of Information and Systems, Institute of Statistical Mathematics
・Nippon Telegraph and Telephone Corporation
・Hitachi, Ltd.
・Mynavi Corporation
・Rejoui. Inc.

-Sponsors

・NEC Corporation
・Teikoku Data Bank, Ltd.・Hitachi Solutions, Ltd.
・WingArc1st Inc.
・Sansan, Inc.

-Supporters

・Keidanren, Japan Business Federation
・Japan Science and Technology Agency
・Nikkei Inc.
・Policy Bureau, City of Yokohama
・Other academic societies

Program

Welcome Speech (10:00—10:10):
Ms. Yoko Ono (WiDS TOKYO ambassador, YCU)

Guest Speech(10:10—10:30):
Ms. Naoko Okamura（Ministry of Education, Culture, Sports, Science and Technology(MEXT))

Ms. Okamura outlined how MEXT's activities lend itself to the collection of various data such as satellite data from space, ocean data, seismic and meteorological data. And how MEXT is utilizing the data in developing a "Data Integration and Analysis System (DIAS)". The use of DIAS aims to solve 'global issues' such as climate change.
In response to the question 'how science and technology are expected to progress in the Society 5.0 era' , Ms. Okamura responded by saying it is important to break the present divide between humanities/social sciences and natural sciences/mathematics, or importantly there is a need to "introduce humanities/ social sciences into science and technology."
She elaborated by saying in the coming era, as more data is used, there is a greater need to consider, for example, the relationship between society/people and science and technology.
Ms. Okamura concluded by saying that she would like to see more people from different lifestyles and backgrounds be actively involved in society regardless of whether their academic background is in humanities or sciences.

Talk 1 (10:30—11:00)
"Improving Employee Engagement: Data Utilization and AI in Corporate Human Resource Development-"
Ms. Naoko Ito (Hitachi Solutions, Ltd.)

Ms. Ito talked about an internal questionnaire on work styles carried out at Hitachi Solutions, Ltd. Results from the questionnaire are used to support "smart life solutions", that is, promoting work-style reforms.
In addition to simply compiling the questionnaire results, the team analyses various attributes and devises measures that enable the employees to work in a trusting relationship across generations and positions.
Ms. Ito also outlined employee hesitation in utilizing personal data and emphasized the need to do the following to get buy-in.
(1) Convince stakeholders on the purpose and usefulness of data utilization
(2) Inform stakeholders that it takes time to accumulate data
(3) Raise stakeholder awareness on the strict privacy protection
To the question 'what is data used for' , she responded by saying that it is collected to solve various social issues. And went onto elaborate that it is important to clarify the purpose, merits, and demerits of data acquisition so as not to lose sight of the key purpose. Additionally, she noted it is important to keep track of how the analysis results are utilized.

"Fusion of Science and Fashion: Nurturing Rational Thinking and Sensitivity"
Ms. Ema Rie (EMarie Co., Ltd., Fashion Designer)

Ms. Rie, a fashion designer who has created many haute couture dress designs gets her inspiration from science and math. Ms. Rie creates new designs by fusing data science and fashion design. Although at first hearing it may seem like completely different fields, Ms. Rie outlined how she collaborates with mathematicians on 3D design using AI. More specifically, by incorporating mathematical thinking such as rotation and expansion, logarithmic spirals, and laws of nature into her design, she can create completely new designs that have never existed before.
She emphasized that although AI and data science, which requires logical thinking, and fashion design, where sensitivity is important, may seem the opposite of each other, "thinking" and "sensitivity" are both important. "They are not contradictory but instead complement and reinforce each other."
Ms. Rie went on to say that by using her experience in using data science and technology, she has been better able to produce dresses that are tailored to individual body types more reasonably.
She finished by encouraging everyone, not only those who like fashion design, but also those who specialize in science and mathematics, to step into her world where data science meets fashion.

Panel Discussion 1 (11:30—12:30):
(Ms. Naoko Ito, Ms. Rie Ema, Ms. Michiko Watanabe, Ms. Yoko Ono (moderator))

A lively discussion, centered on the theme of "Can data science solve anything?" took place during the panel discussion.
Although the panelists were involved in different areas of data science, all the speakers agreed that data science is a field that can make people happy.
The panelists noted that as the convenience and usability of data has increased, so has the concerns about the validity of analysis results and security of information.
On this topic, the panelists concluded by making the following comments.
- It is only humans who ultimately determine the validity of data.
- The data itself is neither negative nor positive and people need to grasp the authentic part of data and make use of it.