

## About WiDS TOKYO@YCU

The Women in Data Science (WiDS) initiative aims to inspire and educate data scientists worldwide, regardless of gender, and to support women in the field. WiDS is administered by the Institute for Computational & Mathematical Engineering, Stanford University, USA. The WiDS conference, associated events, and data challenges are all aimed at nurturing human resources in the field of data science.

## Nurturing the next generation of leaders for Society 5.0 and a data-driven future.

Since 2015, there have been approximately 150+ regional WiDS events worldwide. Japan Yokohama City University (YCU) held its first event, WiDS Tokyo@YCU, on 22nd March 2019 with the cooperation of universities, industry players and public sector participants.

## Human resource development in industry, government, and academia.

Japan's big data/analytics (BDA) software market is expected to reach \380 billion by 2022, according to IDC Japan. However, there is a considerable shortage of data science personnel in this growing market. It is predicted that data science related vacancies, handled by major companies could increase by 6 folds (DODA survey).

To address the growing demand for data scientists, there has been an increase in the number of universities and training organizations providing specialized courses.



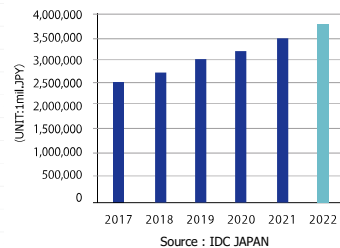
Additionally, even within the traditional faculties, be it humanities or engineering, there are data science-focused courses on offer.

Furthermore, there has also been a public sector movement to develop interest and expertise in data science through the "Data Scientist Development Project for Realizing Society 5.0" by Ministry of Education, Culture, Sports, Science and Technology (MEXT), and "Data Science Online Course" by Ministry of Internal Affairs and Communications. Educational programs provided by private sector organizations are also gaining momentum.

Given the high demand for data science personnel, the different avenues available for gaining the necessary skills have also increased.

However, acquiring skills in this field is said to have many barriers. One of the biggest barriers is the perceived weakness in science or technological literacy and fear of programming.

Many of the data science-related courses are expensive and are not easy to learn. For women, in particular, learning opportunities may be limited due to life-cycle effects.



## Growing needs for data science talent for our future.

# Review of the first WiDS TOKYO@YCU

On March 22, 2019, the inaugural WiDS TOKYO@YCU was held in Shinjuku, Tokyo. Participants active in the field of data science gathered for a day of lectures, discussion, and contest. The following is a summary of the symposium.

## Part1 Lectures by female leaders who are active in the field of data science



Yoko Ono, Associate Professor, Department of Data Science, Yokohama City University, WiDS Ambassador opened the symposium and stated "this year is the first for WiDS in Japan. I want to conduct WiDS Tokyo@YCU activities in Japan based on the following three pillars. That is: to inspire and to educate many people who want to become data scientists. And to support them."

Ms. Sonoko Watanabe, Deputy Director-General of MEXT gave a lecture on the "Development of Data Science Human Resources and Gender Diversity for the future."

Prof. Michiko Watanabe, a professor at the Graduate School of Health Management at Keio University, talked about data science education, especially Japanese educational reforms that strengthen data utilization.

As a corporate use case, Cyber Agent's Mayumi Kousaka presented on "Data Utilization in Human Resources - Data Science for Human Resources Management." Ms. Kikuko Shirakawa, Executive Officer of NTT DoCoMo, gave a lecture on "History of Data Utilization at DOCOMO- Let's make full use of AI."

Ambassador Ono became a facilitator of the Panel Discussion. "What is data science, how can we increase.

participation and representation, and SDGs (Sustainable development Goals) and data science" were the main topics up for discussion.

## Part2 Idea Challenge 2019 at WiDS TOKYO @ YCU



The second part of the symposium was dedicated to "Idea Challenge 2019 WiDS TOKYO @ YCU". The finalists in the 'student' and 'general entry' category presented their analysis and the grand winner was selected in each category.

"New work styles" was the theme of the first Idea Challenge. Six entries, three from each 'student' and 'general entry' proceeded to the final screening at the WiDS symposium. The grand winner of the 'student' category was an all-female team from the School of Data Science at Yokohama City University.

The presentation was titled "37,420,000 Pattern - New Working Styles for the New Era." They used data to analyze the current work-life balance situation in Japan and proposed solutions to address the imbalance.

The grand winner of the 'general' category was a team from ANA Trading Company. The presentation was on "Efficient Use of Toilets - Using Toilet Usage Data to Promote Workplace Reforms". The uniqueness of data used and recommendations made it stand out from the rest.

## Comments from participants and questionnaire results

It was better than any other data science conference I've attended. I feel that the organizational trends and individual contribution in the field of data science were presented without being overly technical. (Male in 30s)

It was an opportunity to reconsider what data science is. (Female in 30s)

I was able to listen to data scientists from various industries, including students, and was greatly stimulated. I felt the possibility of the future. (Male in 30s)

I want to shine like the people who took the stage at the symposium. (Teenage female)

N=225



### Participant questionnaire

Would you like to participate in WiDS Tokyo @ Yokohama City University again?



I got a good understanding of what data science is.



I want to work in data science in the future.



I was interested in the work of data scientists.

