

International Student Collaboration Initiative 2020 in the Novel Corona Virus Outbreak(tentative)

December 4th, 2020* and December 25th, 2020

A joint collaboration between Tsinghua University and the University of Tokyo

The Workshop will be held between the students enrolled in the AI Certificate Program*, and Experience of Manufacturing Engineering of Tsinghua University, and the students of the Engineering Schools and Graduate Schools of the University of Tokyo. The students will be allocated into international groups and work together on AI and IOT related tasks during a one month program. Two Major events will be held in December.

Participants from Tsinghua University (to be confirmed)

Professor Yonggang Meng, State Key Laboratory of Tribology Professor Chenhui Zhang, State Key Laboratory of Tribology Professor Li Shuangshou, Director of iCenter, Tsinghua University Mr. Woody De-Yu Wang, Director of Innovation Education Sector at iCenter, Engineer. Mr. Zeng Wu, Facilitator and expert in smart manufacturing, iCenter.

Participants from Japan (to be confirmed) Associate Professor Atsushi Yamashita(Robotics)

Assistant Professor Dai Kobayashi(Electronic circuits) Professor Hideki Kawakatsu(Microscopy, organiser)

- * November 27th Noon-13hrs (Beijing Time), 13hrs-14hrs(JST) 1st connection rehearsal
- * Al certificate program: The scenario-based innovation tracks for the Al certificate programs include: a) connected device, b) robotics, c) intelligent transportation, d) intelligent city, and e) intelligent healthcare. The students are sophomore or junior.

International Student Collaboration Initiative 2020 in the Novel Corona Virus Outbreak

Objective

International Collaboration is increasing its importance to experiment and seek for new, sustainable ways of being innovative and productive in the novel Corona Virus Outbreak.

As members of Universities and Research Institutes, our quality of life depends on being productive and innovative as a group and as an individual. During the Workshop, we will set three axes as our goals and experiment together on how to think, communicate and act.

Goals

Goal One	Experimenting Communication Tools for innovative thinking
Goal Two	Sharing the Notion ' Who's going to do it? Us!'
Goal Three	Working together online and getting something done

Framework

-Up to around 20 students from each university will attend the workshop

-Two to four professors from each university will act as mentors

-Students will be preallocated into around 10 groups composed of four(six?) students (roughly 1/2 the number from each institute).

Tasks

Each group will submit TWO prototypes based on different ideas. Basically, within a group, students from one institute will implement ideas initiated by the students from the partner institute.

Presentation

-On selecting the ideas of the prototypes

-Promotion of their work (prototype).

-On what was found on the way, take home messages

Ice breakers

-Simple games

-Each group will be asked to make a short Promotion Video of the group (upto 3 mins max).

Tools

- Arduino, ESP32, LORA, WiFi, Bluetooth, sensors, actuators, LEDs, Arduio-IDE

- circuits, amplifiers

Basic guideline on what to realise.

- 1) Something that would sell or something fun,
- 2) Something that will aid society or people in need,
- 3) Something scientifically or engineering-wise significant.

Schedule

- 1) November 27th connection rehearsal
- 2) Dec 4th FIRST Workshop on ISCI 2020
- 3) Every Friday from NOON 13hrs (Beijing Time), 13hrs-14hrs (JST)
- 4) Dec 25th SECOND Workshop on ISCI 2020

Other issues

- 1) Credits Undergradiates > (UTokyo) Kawakatsu's lecture attendees Graduate students > (UTokyo) to enroll in International Workshop Training Course
- 2) Equipment (UTokyo) > to be supplied in part
- 3) Luncheon and snacks > for online get togethers > looking for funding.

Contact persons (to be updated)

王德宇 Woody De-Yu Wang (iCenter)

Director of Innovation Education Sector, iCenter, Tsinghua University Secretary General, Maker Education Base Alliance +86 10 6279 7438 wdy@tsinghua.edu.cn

山下 淳 Atsushi Yamashita, Ph.D. (Robotics)

Representative for Education and Research Exchange between Tsinghua University and the Department of Precision Engineering, The University of Tokyo Hongo 7-3-1, Bunkyo-Ku, Tokyo 113-8656, Japan Tel: 03-5841-6457 Fax: 03-5841-8548 E-mail: yamashita@robot.t.u-tokyo.ac.jp URL: <u>http://www.robot.t.u-tokyo.ac.jp/yamalab/</u>

and

川勝英樹 Hideki Kawakatsu(Microscopy and Nanomachines)

Representative for Education and Research Exchange between Tsinghua University and the Department of Precision Engineering, The University of Tokyo Komaba 4-6-1, Meguro-Ku, Tokyo 153-8505, Japan +81-3-5452-6200 <u>kawakatu@iis.u-tokyo.ac.jp</u> URL: http://www.inventio.iis.u-tokyo.ac.jp/