Fellowship program to foster architects who lead super-smart society with co-creating innovative solutions to "X-Care" social issues

- Program objectives
- ② Prospective Profile of the Program Graduates
- ③ Curriculum policy

Prof. Hideki Tode

(from 2022FY)

Department of Core Informatics, Graduate School of Informatics (until 2021FY)

Electrical Engineering and Information Science, Graduate School of Engineering

"X-Care" social issues to achieve a super-smart society

"Smart City Strategy" promoted by Osaka



X-Care Social

A general term for each issue to realize a Super Smart Society

[Hito] Human Health Care







- Countermeasures for Japan's ageing society with a low birthrate
- Improving health standards and decrease the burden of medical expenses
- Supporting the elderly and socially vulnerable people

[Mono] Product Care









- Promoting/supporting industry
- Promoting/supporting agriculture

[Syakai] Social System Care









- Political and social reforms
- Education reform and support
- Infrastructure/disaster prevention plans for the future
- Environmental countermeasures

[Bunka] Culture Care

It is a social demand to prevent "unhealthiness" and make a swift recovery

We aim to foster talented personnel who can solve X-Care issues

Personnel in demand:

People who can solve the problems concerning *Hito, Mono, Syakai*, and *Bunka*, which exist in both cyber/real space by 1) collecting and analyzing various data and 2) provide the most suitable solutions.



[Project objectives]

- This program aims to foster architects who can provide solutions to "X-care" social issues through co-creation process with various stakeholders. "X-care" is a coined word to put together the following social issues: Human Health Care, Product Care, Social System Care, and Culture Care. It is important to watch for the conditions (healthiness/soundness) of those X-cares and prevent unhealthy situations, as well as to provide a suitable solution for making a swift recovery when finding a malfunction.
- Given the backgrounds, it is our objective to foster researchers who possess the ability to solve social issues mainly with Informatics and interdisciplinary approaches through collaboration with Natural Sciences and Humanities & Social Sciences.

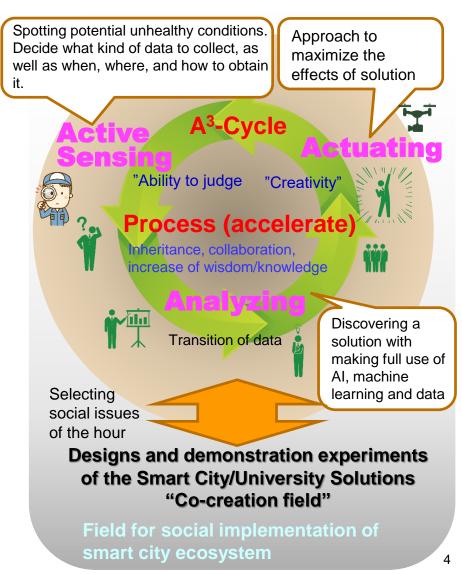


Architects who can provide solutions to "X-care" social issues through co-creation process

In-demand skills

- Ability to judge which information to collect to evaluate the health conditions of the X-Care social issues.
- Expertise to study the soundness of X-Care social issues essentially based on the collected data.
- 3 Data analytics skills to be able to process and analyze the collected data concerning the X-Care social issues promptly by utilizing appropriate algorithm.
- skills to design a sustainable ecosystem and to work in collaboration with others to solve the X-Care social issues.

Find a better solution through A³-Cycle





[Duties of the Fellow Students] (Part 1)

 Improve data collection skills, analytic skills, and problemsolving skills

Take lectures which contribute solving X-Care social issues. i.e., Basic lectures provided in Graduate School of Informatics, lectures to give better understanding of the social issues and so on Receive ethics education such as "Scientific Literacy"

- 2. Acquire skills to design solutions through co-creations
 - Participate in the problem solving competition for development of smart society (tentative name) etc.
- 3. Develop the ability to solve social issues with interdisciplinary approach
 - Take part in a co-creative research collaboration opportunity (Apply for co-creative joint research projects and simulated industry-academia-government collaboration project)



[Duties of the Fellow Students] (Part 2)

(4) Develop fundamental research skills

- Create research proposals (3-year proposal and annual proposal)
- 2 Research Performance Progress Report (achievement evaluation): Twice a year/Supervisor, etc.

(5) Acquire transferrable skills

- Foster originality, creativity, ability to think outside the box, challenge mindset, ability to be aware of people's needs, research management skills, communication skills, leadership skills, etc.
 - ⇒ Enroll in Technology-based Entrepreneurship Courses (TEC I~IV)
 "Special communication seminar based on multidisciplinary sciences"

(6) Design your own career

- Long-term internship (TEC-III or C-ENGINE)
- "Interactive matching" (Meet & Greet with companied for internship opportunities) and mentor program



Thank you.

This fellowship is for highly motivated students just like yourself -- We are looking forward to receiving your application.

Good luck!

