Welcome and let's get going!

Graduate School of Decision Science and Technology, Tokyo Institute of Technology

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Graduate School of
Decision Science and Technology,
Tokyo Institute of Technology is waiting for you.
We recruit people who aspire the society where the technology harmonizes with human beings.

Contents

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“I try to pursue the question
about the society and modern problems
in the academic world to look
for my own answer.”

“I want to deepen
what I learned
at the university more deeply.”

“I have acquired a broader knowledge
in my undergraduate years.
Yet I would like to establish my own academic field
in the graduate school.”

“Utilizing my specialty
at science and mathematics,
I would like to analyze the society.”

“I would like to think
about the future of technology and
the human society
from various perspectives.”

Message

For the students who have these awareness,

Graduate School of Decision Science and Technology,
Tokyo Institute of Technology
provides the opportunities
to consider your thoughts together.

"To connect human, technology and society"
is what DST is exploring.

Four approaches of DST

Graduate School of Decision Science and Technology consists of 4 departments.
Each department is conducting researches focusing on the problems of human, technology and social issues with their own approaches.
The faculty manages the laboratories, provides education and research activities tackling new researches in each department.

Department of Human System Science

Towards the integration of rich creativity and scientific analysis

The Department of Human System Science seeks to contribute to the development of user-centered science and technology by examining human characteristics such as intelligence, cognition, socialization, communication, biology, and behaviors, as well as through constructing a theoretical system for the development of human capabilities.

Based on the theoretical system, we clarify the relationships between human, various media and machines. We also contribute to the development of new media and machines that can expand human capabilities while being user friendly.

Our department intends to form a new discipline based on fields that range from humanities and social science to science and engineering, including psychology, pedagogy, physiology, linguistic theory, cognitive science, human science, education engineering, biomedical engineering, methodology development, and system development. We aim to nurture talents that have the ability to take a broad perspective and solve practical problems by integrating the rigor of science and engineering methodologies and the rich inventiveness of humanities and social science.

Graduate School of Decisio

Department of Industrial Engineering and Management

In our department, Industrial Engineering and management is positioned as "Technology on Technology."

In Business, it is necessary to identify and solve problems while solving frictions that exist between technology and human and reconciling diverse values.

Therefore, we seek to identify some kind of methodologies and approaches by tackling various issues of value creation processes in the management. As a "Problem Challenger" who realizes that continually, we aim to nurture engineers who have abilities beyond the traditional boundary between humanities and science, including:
- Ability to structure and model problems conceptually
- Ability to statistically analyze data collected through careful observations
- Ability to identify and formulate problems and find creative and integrative solutions
- Ability to think logically and flexibly
- Skills to communicate and mediate problems

Equipped with strong knowledge of both engineering and scientific approaches with broad point of view, our students can expect to have many career options after they graduate.

Graduate Courses and Departments

- Graduate School of Science and Engineering
- Graduate School of Bioscience and Biotechnology
- Interdisciplinary Graduate School of Science and Engineering
- Graduate School of Information Science and Engineering
- Graduate School of Decision Science and Technology
- Graduate School of Innovation Management

Department of Value and Decision Science

Nurturing outstanding leaders who excel at the language of vision and real data

VALDES (Department of Value & Decision Science) was founded in 1996 with the objective of nurturing top leaders who can make the best decisions in practice by building consensus based on philosophy and consciousness (natural language) and representing problems based on Mathematics (formal language).

Stagnation has plagued the Japanese society as well as the global world. There has been a lack of vision for overcoming the stagnation in existing systems and frameworks. There is also a paucity of analysis that can identify the causes of stagnation. Both government and business organizations have been paralyzed by ineffective decision making.

In this situation, a leader should take ownership of the problem to act appropriately. It is also necessary for a leader to have the intellectual ability to look beyond the boundaries of specialization and authority to grasp the full problem. VALDES nurtures such leaders by developing their capabilities and preparedness.

on Science and Technology

Department of Social Engineering

The Department of Social Engineering always has a vision for the future, identifies solutions to problems, and pursues rich possibilities in the new era.

Social engineering is an academic discipline that involves creating "objects" to solve social problems and applying them to improve the society.
"Objects" include laws, mathematical models, public space, arts, and many others.

We developed the model that analyzes the effects of global warming on the society and economy and a practical cost-benefit analysis model that assesses the usefulness of public works. In 2003, we were awarded the Melina Mercouri International Prize by UNESCO for designing the Koga General Park in Ibaraki prefecture.

Thus, we have many accomplishments like this and played a central role in the world with conceptual and precisely analytical abilities.

To meet the needs of the society, the graduate school established programs such as the theory of institutional design (economics), public systems, and spatiotemporal design in 2006 fiscal year. In addition to the pursuit of robust theories related to Humanities and Social Sciences, the school also endeavors to develop talents who have both practical and theoretical knowledge.

This time, Prof. Iijima from Tokyo Tech and Dr. Taniguchi, assigned to the Department of Value System from 2010, talked about the charms and the expected portrait of students. We could sense the role as the place to raise new human resources and to send them to the society beyond the framework of science and liberal arts, and the vivid atmosphere of students who are changing themselves from day to day.

Their expectation for the people who want to study at DST seems to be expanding.

"I hope those who can make good use of the chances to come."

Junichi IIJIMA

Dean of the Graduate School of Decision Technology Science and Technology, Professor of the Department of Industrial Engineering and Management

"In a way, Tokyo Tech can be the place for them to study about Japanese society beforehand."

Naoko TANIGUCHI

Associate Professor of the Department of Value and Decision Science

Graduate School of Decision Making and Science of free atmosphere

I(IIJIMA) Thank you for being with us today. What was your impression of TITECH when you came here, Dr. Taniguchi?

T(TANIGUCHI) I studied social psychology at the Department of Humanities and Social Science of Faculty of letters in Keio University, and then conducted research about political psychology at Keio Law School. My research was to apply the public psychology and marketing to politics, and these were related to liberal arts. But I had an opportunity to conduct a collaborative work with the researchers of Tokyo Tech because I used a statistical-analytical approach which is a methodology for the science-and engineering fields. The image of the humanistic university is that it has a strong hierarchy. However, I feel the freedom of research in Tokyo Tech.

I Especially in the Grduate School of Decision Science and Technology, we can feel a non-authoritarian atmosphere because you can decide the theme of research by yourself. And I recenty feel that "globalization" is a keyword. The number of offerings from the overseas universities is increasing, and the actual number of partner universities is also increasing.

T Each student who entered the graduate school from inside or outside of Tokyo Tech has different character. When they become the leader in the society, it is impossible for them to work only in their own specific area of expertise. They cannot win the game without knowing the intentions of both sides; science-and-engineering and liberal arts. Therefore, the place, where they can study both way of thinking, such as the DST becomes more important, I think.

Problem Solution and Abstraction Thinking

I How do you feel about the quality of the students?

T I was surprised that the class was quiet with less chattering. Now, I am seeking for the way to let them warm up.

I Let them calculate. Then they will warm up.

T Indeed. When I give them a quite challenging question, they would try and solve it.

I I think they like solving problems rather than finding academic-oriented solutions. Additionally, I hope them to learn abstract thinking. Abstract and formalize a problem once, then search the way to solve it. The events which appear in society are not always exactly the same.

But it is needed to find out the commonality behind or bottom of them.

T If the students who have "the power to solve" as the science-and-engineering major obtain "the power to find matters," so to say, "The more Moors, the better victory."

I What do you think is the advantage for women, including yourself, who study in the science-and-engineering field?

T I, myself, got the image that I jumped into a competent boy's school when I was assigned to Tokyo Tech. I felt tension because everyone was excellent. When the female student starts working with the hope to do a really good job, they will be in the same situation. The business world is still male-dominated. In a way, Tokyo Tech can be the place to study about Japanese society beforehand for them.

Fascination of Gender-equal Society

I Finland is the country attaining the gender-equal society. Prof. Aino Sallinen, who was the president of University of Jyvaskyla which our

department collaborates with, is an attractive lady and the first female university president in Finland. I have had a chance to ask her, "How did the society of Finland change by actualizing the gender-equal society?"

T What was her answer?

I She said, "It became a tolerant society." I thought this is a very important word.

T It doesn't mean that females are cherished because they are minority, but means that the tolerance was brought out because the number of female increased in the man-centered society. That is excellent. I think the female can act the role as a mediator. They have a special ability of connecting or accommodating different fields.

I I think the mediator is close to the concept of boundary-object.

T The graduate school is the entrance of a society. I want them to do what they should do feeling the severity of the competition in the man-oriented society inTokyo Tech.

Image of the human resource our department expect

I Students are interesting once they wake up to something. Once I sent a student who was not good at English to a summer school in Finland. Probably he enjoyed himself very much, so he asked me immediately after coming back to Japan if there is another one during winter vacation. It is almost like a chrysalis becomes a butterfly. There are many of that kind of chances in this department because we are aggressively building up the international cooperation.

T It can be a good opener for them to change.

I But the most important thing for them is to change themselves. A student, who declared that "I will change" when he entered into the graduate school, became a laboratory manager and worked actively. As the result, the quality of his research became excellent. I was surprised.

T There must be something to think of himself.

I Currently there is a exchange program with Tsinghua University. A student, to whom I suggested to go to France to study, went to Tsinghua University saying that it's better to work with China in the future. He is keeping sending me reports every week to obtain dual-degree from the both universities.

T The person who can take a chance improves. Those students are welcome to our department.

Various Capability

I From last summer, we started a project type of class named "Disaster Solution Practice." I felt a good response. The project was to go to the disaster area of the Great East Japan Earthquake and then to support a short film with people living there. I found the students of Tokyo Tech could do this feat.

T What do you mean?

I They usually look spaced-out and don't seem very active. However, they were vigorous at that time. They must felt that what they were doing was exactly accepted at the site because they could make a wonderful piece. The project was conducted by the university. But now, the students have built a website by themselves after the class finished and it has acquired a good reputation.

T I am currently doing research for another project in collaboration with Tohoku University. This kind of practical activity is also important.

I It was significant for us to able to conduct such a project-type class as "Disaster Solution Practice."

T There are many projects collaborated with the society and companies in Tokyo Tech.

I As one of the characteristics, the Tokyo Tech students have the advantage that they can find job as options after the Ph.D program, as well as after the master program. It is said that if a student go up to a graduate school of the liberal arts university the researcher is only the position they can get. Yet there are varieties of offers for the graduate students of Tokyo Tech.

T The role of the DST of Tokyo Tech might be the window of the society. We must send competent human resources to assume the role as an interface between the society and technology.

I We, as the faculty of the university, would like to offer various possibilities and options to the student. Thank you very much for today.

Naoko Taniguchi

Ph.D., Graduate School of Law, Keio University, Major: Political Science, especially Political Behavior and Political Methodology.
From internet survey to large-scale international survey ("Asian Barometer," "World Value Survey," etc.), based on wide-range research and letting the data analysis and the verification.

Junichi Iijima

Ph.D.,Graduate School of Interdisciplinary Science and Engineering, Tokyo Tech Major: Information systems and System theory Especially interested in, business process modeling and effective IT investment on business. Philosophy of life: "A rolling stone gathers no moss."

Human System Science

Kae NAKAYA

I studied Computer Science in TSUDA COLLEGE. If I were to continue doing my graduate studies in the same college, I would be in the same "girl-school" environment which I had been in since junior high school. Therefore, I decided to join the graduate school in another university.

When I was in the third year of my undergraduate studies, I visited the KODAI-SAI, which is Tokyo Tech's school festival held in fall. I received a pamphlet at the main gate which said; "we develop web applications for education". I was interested in applications for educational purposes so I visited the stated laboratory. That was Murota laboratory, which is the laboratory that I currently belong to.

I focused on estimating method for English educational video contents in my bachelor thesis. I think my current laboratory suits me because it provides an environment that allows me to combine computer science and education. Before applying for the school, I participated in the laboratory's seminars as an observant and emailed my research plan to Professor Murota. It took some courage but I think these efforts are important. Basically I think it is a good idea for potential students to meet each other by participating in the seminars. Other than students from Tokyo Tech, the Graduate School of Decision Science and Technology is also open for accepting students from other universities.

"A fulfilling environment for those who want to challenge their limits"
Kae Nakaya

To me, the benefit of joining Tokyo Tech is having the opportunity to get used to the male-dominated environment.

In my laboratory, I feel that male students tend to focus a lot on technical details. While I agree that technical details are important, the design of educational content, such as whether it is suitable for high school students, is also critical. I seek to contribute to our laboratory's activities by stimulating discussions about such issues. Also, even though Prof. Murota has many students and is very busy, he has been a tremendous help with my master thesis and I am really glad about that.

I think Tokyo Tech provides a fulfilling environment for those who want to challenge their limits. For first-year master students, there are many challenging courses and assignments. It is therefore important to maintain good health in order to also conduct research. Also, since there are few female students, we have formed strong relationships with one another. Recently, I went on a trip with my friends just before our graduation.

In future, I am planning to enter the Ph.D. course and work as a researcher in the field of educational engineering. There are few female researchers in this field so I hope to help those who intend to join the field. Currently, I am helping in the mentor system of my alma mater by providing advice to students who are applying to universities.

Department of Industrial Engineering and Management

Nao MAMURA

I continued to study in the graduate school after completing my undergraduate studies in the Department of Industrial and Systems Engineering of Tokyo Tech. I was interested in business and would like to learn about the science of management. I want to study about engineering and management so I opted to study in Tokyo Tech. My father was happy when I was enrolled in the university because he also graduated from Tokyo Tech. In those days, only one percent of the students were female.

In the Department of Industrial Engineering and Management, you can learn many different things. These includs not only science-oriented subjects related to mathematics and computers, but also humanities-oriented subjects related to business administration. You can also take courses offered by other departments. I obtained the necessary course credits earlier and was able to skip one year. I think the good point of studying in Tokyo Tech is that there are opportunities for improving logical thinking. While working on my thesis, I conducted hypothesis testing and that was helpful. Since mathematics is necessary for both business economics and accounting, those who are good at science-oriented subjects should also take the subject.

"It's your life – the choices you make will be the emotional support of your life"
Nao Maemura

The good point of being a university student was that I could decide how to use my time. That means self-management becomes important. In Tokyo Tech, being a female student is an advantage. Boys behave gentlemanly, and teachers are kind and polite. Because there were few female students, we were highly connected. Since I skipped one year, I had connections with five generations of students and was sort of like a hub. We had similar temperaments and the balance among us was good. We even went to Vietnam together to visit the home of a Vietnamese student.

I want to become an "international"employee in my job. Therefore, I would like to work in companies that provide opportunities for young employees to work abroad. I hope to change the image of Japanese working women in future. I think there are actually many competent Japanese women but they often have to compromise when it comes to employment conditions. I believe that there must be a way for women to balance their family and career in Japan as well as in other countries.

My advice for prospective students is that you should pursue the things you want in your mind without hesitation. In today's world, it is difficult to forecast the future. It's your life – the choices you make will be the emotional support of your life. Do not worry about risks and take up the challenge.

Department of Value and Decision Science

Risa HORII

When I was a bachelor student, I studied behavioral economics in the Department of Economics, Faculty of Economics and Business Administration at the University of Kitakyushu. I was especially interested in the circulation of rumor. I am currently a member of Kijima Laboratory and I am conducting research about tenant fees, allocation of premises for tenants, and the optimization of services provided by tenants in a shopping mall. Frankly, I choose this theme because I am a "shopping enthusiast." When I travel, I always visit shopping malls. I notice that a key problem in the mall business is failing to meet customer needs when renting stores to tenants. Therefore, I think developing a model that can simulate shopping malls will be useful for mall businesses.

The Department of Value and Decision Science was established with the purpose of conducting practical and interdisciplinary research and education activities that integrate humanities and science subjects. Since social issues are complex, it is impossible to study them from the perspective of one specific discipline. I think people with interdisciplinary way of thinking are needed in our society. Therefore, I made up my mind to study in the graduate school. In Oōkayama campus, I like the wooden pavement in front of the main building most. Sometimes I would borrow a book from the library and sit along the pavement with a cup of tea. In the campus, the research environment is also pleasant. I have never felt inconvenient as a female student. The faculties and friends in my laboratory all behave gentlemanly. My advisor said, "you can do research on whatever you question", and I value this very much. I will never forget the joint retreat seminar we had with two other laboratories in the same research field and the drinking party which lasted until midnight. In the Department of Value and Decision Science, there are many chances to interact with peers outside the laboratory.

> "I have many desires and will strive towards achieving them"
> Risa Horii

I envision myself as someone who has the ability to determine the requirements of the society at large, mid-level communities, as well as individuals. Specifically, I want to be a capable consultant or facilitator who has diverse viewpoints. I definitely want to live my life to the fullest in both work and private lives. I have many desires and will strive towards achieving them.

Just as there are unlimited questions in life, there is no limit in research. Yet, to complete a thesis or present at an academic conference, it is necessary to delineate a boundary and achieve some closure. Whether in research, life, or job hunting, it is necessary to set a big vision and identify clear incremental goals for achieving it.

Department of Social Engineering

Risa MISONO

I majored in geography at the College of Geoscience, School of Life and Environmental Sciences in the University of Tsukuba. I also studied topics such as meteorology and geology. I was intrinsically interested in social engineering and also wanted to do both planning and research which is the key component of geography. So I attended a briefing session by the Department of Social Engineering in Tokyo Tech to find out more when I found that I could graduate by advanced placement.
At that time, Professor Saito told a story which set me thinking: "Tottori Sand Dunes is maintained artificially. We have to consider whether it is a good thing, not only for human beings but also for the environment and animals." I decided to join the laboratory because I wanted to conduct research related to the fundamental significance of landscape.

The good thing about Tokyo Tech is that there are many different professors. It was interesting to take different professors' classes. In Tsukuba, the male-to-female ratio was about 3:2.

> "In addition to studying, I think students should also engage in other activities."
> Risa Misono

Now I am looking for a job in the fields of finance or real estate. I want to be involved in a job where I can contribute to the development of the society. It seems that there are many opportunities for me to exploit my ability and science-and-engineering-related knowledge in the fields of town development, investment, and asset management (e.g., trust). I had studied about various fields in school and I want to use what I had learnt at work.

I was lucky because I had the opportunity to learn about my aptitude and goals through an internship which I participated during the summer vacation of my first year of master course. It was also interesting to meet and exchange information with Tokyo Tech students during my job hunting. I even met some peers from Tokyo Tech who were in the same class as me.

In addition to studying, I think students should also engage in other activities. In my undergraduate years, I was a member of a swimming club and I practiced with students majoring in physics. I even tried to complete a marathon. Working in part-time jobs is also a good way of meeting people. I got to know someone majoring in physics in Tokyo Tech during my part-time work. I decided to join Tokyo Tech partly because she was entering a graduate school of Tokyo Tech. We were working in a pastry shop at Tokyo Station. We did not expect to find females majoring in science and engineering fields there. Female students have strong connections with one another in Tokyo Tech.

24 months in the graduate school

The master program seems long yet short. Taking highly-specialized courses, you will steadily make progress in research. After getting used to new life and friends, you may want to make a concrete plan of your future based on your vision. It is also important to learn from the experience of your seniors.The experiences of studying abroad and internship will help you get more options when planning for your future.

First-year master student

4 April

Entrance ceremony ● Orientation ● Interact with senior students and foreign students in the welcome party for new students. First semester begins ● Attention! Tokyo Tech has a unique calendar that balances the number of classes. Class registration ● You can register easily through websites. Make sure your schedule takes into account the job-hunting activities which begins in winter. Laboratory seminars begin ● Autonomy is important in the seminar in the graduate school.

Those who would like to study abroad should gather the necessary information at this time.

5 May

● Civil servant exam. Watch your seniors' activities! ● After the brief Golden Week vacation, start working on your research.

6 June

● For those who aim to improve their scores in TOEIC, this time of the year may be a good chance. ● Those who would like to participate in a summer internship should gather information.

7 July

Examination for first semester ● Exam and assignment reports are usually due around late July or early August, depending on courses. ● Summer vacation begins.

The summer vacation is a good opportunity for joining summer schools and/or short-term visit programs in a foreign university!

8 August

● Camps organized in laboratories, conferences, internship etc. ● Preparations for the school festival, "Kodaisai", begin in laboratories.

9 September

● End of summer vacation.

10 October

● Second semester begins. ● Class registration. ● KODAISAI - The University festival. ● Start collecting information about job hunting.

Time to plan for your future.

11 November

● Observe the research done by senior master students and identify the topic of your research. ● The most frequently asked question during job interview is "What kind of research are you doing?"

12 December

●Visit alumni and company briefings actively. ● You may discover something new when you show your job application form to others.

1 January

● Feel the tension among senior students in your laboratory as they try to meet the deadline for completing their theses. At the same time, start job hunting actively.

2 February

Examinations for second semester ● Deadline for Master theses ● Deadline for theses and timings of oral defence differ depending on departments Thesis defence by Master candidates ● The silence after a storm. Next year it will be your turn!

3 March

● Farewell parties, graduation ceremonies... One more year to go. ● At this time, there are many conferences. In the first year, start with poster presentations.

Message from our experienced

Emiko FUKUDA

Lecturer of the Department of Computer Science,
National Defense Academy of Japan
Ph. D., Completed Doctorate Degree in 2005
Department of Mathematical
and Physical Sciences,
Faculty of Science, Japan Women's University

Currently, I am working as a public servant in the National Defense Academy. My job involves teaching undergraduate students who will become self-defense officials in future.

When I was a student in Tokyo Tech, I was a member of Professor Shigeo Muto's laboratory in the Department of Social Engineering (the laboratory was in the Department of Value and Decision Science then). The theme of my research was "Cooperative Fuzzy Games Arising from Economic Situations". It was recommended to me by Professor Muto, who introduced readings on the topic and said "are you interested in such topics?" rather than "work on this topic". I was able to develop interest in the topic naturally. Considering the academic harassment in recent years, it was a blessing to work with the professor.

I think it is good that I was able to build a network of social contacts while studying at Tokyo Tech. I appreciate the support from people around me when I first joined Tokyo Tech, during the five years of my master and doctoral studies, and when I was looking for a job.

I applied for my current job when I saw the recruitment advertisement. I think I am focusing on my own research calmly. When I first started work, a female student who was about the same age as me said, "You look most lively when giving presentations." Although I did not realize it, I think I like what I am doing and that is why I am continuing in this job.

At work, I am careful about my appearance because students in the National Defense Academy wear uniforms. I sometimes go shopping for clothes and have dinner with my old friends. I think it is important to have friends from school days, in workplace, as well as in other walks of life.

Message from our experienced

Mitsuyo, TOYODA

Instructor of School of Human
Science and Environment, University of Hyogo
Ph.D., Completed Doctoral Degree in 2009
Department of Agriculture,
School of Agriculture, Meiji University

I am currently conducting research and educational activities about environmental education and environmental philosophy. Originally, I studied biotechnology in the Department of Agriculture at Meiji University. I was interested in the ethical issues between human and other living beings so I went to the University of North Texas to carry out research about environmental ethics. After moving the the University of Hawaii, where I learned philosophy education for children, I deepened my study on environmental ethics by incorporating the idea and method of philosophical dialogue. I met Professor Toshio Kuwako at a conference in Hawaii and felt a strong empathy for his research. I then participated in a research project about consensus building at Sado-ga-shima (Sado Island). I had always thought that Tokyo Tech specializes only in science and technology. I was surprised to find that it has a Graduate School of Decision Science and Technology.

At Sado, my research focused on the empowerment of enterprises engaged in the nature restoration business. Establishing theories through practice is a key feature of Kuwako laboratory. Because Tokyo Tech places high value on developing technologies, I was able to put ideals into practice and generate academic results that also contribute to the local community and society.

The Department of Human System Science is a multidisciplinary department. When I was working on my Ph. D. thesis, I often encountered unexpected questions from professors of different fields. This experience is very important for conducting research in an open society. Since different people have different perspectives, I often need to explain my perspectives when sharing my ideas or receiving comments from others.

I am currently working in the School of Human Science and Environment at the University of Hyogo. In the school, researchers work in various disciplines. Since it is necessary to have the ability to take different perspectives when carrying out environment-related research and educational activities, it is helpful to collaborate with colleagues in various disciplines.

Second-year master student

4 April
● New semester begins.
Class registration ● You can take the class related to your master's thesis subject.

In your one-year schedule, study hard and play hard.

5 May
● Civil servant examinations

6 June
● Those who would like to enter the Ph.D. program should sharpen their research plan at this time.

Tokyo Tech has a strong financial support system for students in the Ph.D. course.

7 July
● The last summer vacation begins
● There are also students who decide to participate in short-term visit programs in the summer vacation of their second year of master course.

8 August
● Conference presentations, preparations for master thesis, travel etc…

9 September
● Classes for second semester begin
Course registration ●

10 October
● KODAISAI - The University festival

Advice first-year students on their future planning.

11 November
Write-up of master thesis. ● Be persistant and you will eventually experience the fun of research. Gather comments and find hints in seminar discussions.

12 December
● A master thesis features both writing and oral presentation. Although it is challenging, it is a form of learning
Make good use of the advice by your advisor and friends in your research!

1 January
Feel the joy of research as you devote yourself to it.

2 February
Deadline for master theses. ● Deadline of thesis and timings of oral defence differ depending on departments.
Oral defence for master theses. ● Finally it is over! Make sure that you carefully revise your thesis to address the questions and comments raised during defence. Leave no regrets!

3 March
● Join a graduation trip, visit your home town, prepare for a new life, be there for the farewell party.
Graduation ceremony ● This is the end of 24 months.
Ask yourself, "You did enjoy yourself and did your best in the last two years, didn't you?"

Some students may also present their master theses at academic conferences.

Take a stab at working abroad with “the world-class technique” learned at Tokyo Tech

Kayo SAKAMOTO

Ph.D.(Engineering), Completed Doctoral Degree in 2008
Graduate School of Human Developmental Sciences,
Subdivision of Psychology, Ochanomizu University
Scientist, Computational Social Cognition,
Institute of High Performance Computing,
Singapore Agency, Science, Technology, and Research (A*STAR).

> “A different view of Japan that can only be seen from outside”
> Kayo Sakamoto

A*STAR, Agency for Science, Technology and Research, is a government research agency in Singapore. I am currently working as a researcher in a computer science laboratory affiliated with the agency.

The opportunity to work in Singapore came by chance. I was attending a conference on artificial intelligence in the U.S. where I met my current supervisor, who is a psychology professor at North Western University. He mentioned that he would be working as a visiting professor in Singapore and he was looking for someone who could understand both psychology and technical simulation to work in his research project. I was completing my Master course at that time and I thought “could I be the right person?”

After I returned to Japan from the conference, I wanted to let the professor know about my research so I sent him my thesis. His reply was positive and he said “Your research is very interesting and it is related to our project!” He invited me to join his research project in Singapore and I agreed without hesitation since I had always wanted to do research abroad.

Our research team in Singapore is interdisciplinary in that it includes professionals from both humanities and science fields. We have members with different expertise and nationalities. Some of our members also studied in countries outside their home countries. It can be said that our team is culturally diverse.

While it is exciting to work in an international and interdisciplinary team, there are some challenges. Members of the team are required to collaborate in research so I have to find someone to work with. However, each member in the team has different expertise as well as different priorities and interests. Therefore, the first challenge is to find someone who can work with me. I have lost count of the number of research proposals I have written and abandoned. If I cannot find a supportive collaborator, my proposals would not be useful even if they had the potential to be realized.

I notice that my interpersonal skills have improved. For example, I have three supervisors and one of them is a British while the other two are Americans. When explaining my research proposals to them, I have to appeal to them differently: some of them seek exciting ideas while others want clear explanations and precise work plans. Also, some of my colleagues prefer to understand things in mathematical terms while others like to relate concepts to specific or daily examples. Therefore, different approaches are needed to persuade them. Every time I revise my proposal’s presentation, I gain a deeper understanding and better overview of my research subject. As a result, I have become more logical in thinking.

Prof. Nakagawa, who was my Master thesis supervisor, had always said that the “selling point” of the cognitive science laboratory of Tokyo Tech is its interdisciplinary nature. This has become clearer to me after I left Japan to work in another country. I was selected for my current job in Singapore because I was seen as one who can understand both psychology and technical simulation. I am now working in an environment where my colleagues have diverse backgrounds. Although there are times when conflicts arise among people such as between a mathematical model expert and a psychological experiment expert, I feel that I can understand both their perspectives as this situation is something natural for students of Tokyo Tech. I think this is what makes Tokyo Tech different from other universities.

I can attest that the technology and the knowledge students will learn in Tokyo Tech are well accepted and recognized outside of Japan. Therefore, I recommend Tokyo Tech graduates to apply the skills they have learnt and work in other countries.

Living outside the highly-consolidated social systems of Japan might be quite risky (do not expect the inclusive health-care system in Japan to exist everywhere). I feel that my future may be unpredictable in these few years. Nevertheless, one may see a different view of Japan that can only be seen from outside. I encourage current and future Tokyo Tech students to apply what they discovered in other countries to the development of education, industry, and even politics and lawmaking after returning to Japan. That may be the source of power that will transform today’s Japan. As long as one is confident for such great endeavors, Tokyo Tech certainly provides the necessary foundations.

For our age of globalization

The Graduate School of Decision Science and Technology is seeking the development of human resources who can play active roles in the world toward the era of globalization.

Like it or not, we are entering into the world where we work with the people of all over the world.
The era when the international relationship was for scramble of goods has passed. We'll build a prosperous future making rules and sharing the values with people of all over the world without fears for innovation in limited resources and environment.
You don't need to think that you can't do it because your English is weak.
If you firmly have a universal language called technology, you will be able to work with the world properly.
That is the strength of the DST of Tokyo Tech.

International Collaboration Project of DST

Currently, the number of MOU (Memorandum of Understanding) partners is increasing. The interaction with Telecom Paris Tech starts on March 2nd, 2012, and the one with University of Hawaii at Manoa starts on March 19th, 2012 officially. In addition, many guests from abroad are visiting here. As a unique project of our graduate school, we send students to the summer school at University of Jyvaskyla in Finland. In ME310 Design Innovation Program, short term program mainly held in Paris, France, jointly conducted by Stanford University (USA) and Ecole des Ponts Paris Tech (ENPC, France), new project design which complies with the request of supporting companies will be proposed by the collaborative study by the team of international student. As a long-term program, there is a double-degree program with ENPC. DST students can obtain the master degree from both schools in a minimum period of three years if they can complete the course and fulfill the prescribed conditions.

Collaboration Project with Northern Europe

(2009-2013 fiscal year, 5year project)

Paper craft made at a Finland event.

DST is playing a central part in promoting the activities to deepen our partnerships with Scandinavian counties through the project called "the Collaboration Project with Northern Europe" started in 2009. Scandinavian countries have formed a human-centered society by having strengths in the field of education, welfare, environmental conservation and so on sharing the value of "the realization of high quality life." It's believed that there are a lot of points to be considered as preference from the viewpoint of this "improvement of life quality."

Learning from Northern Europe about how to realize the spiritually affluent community, the old age in which people can live without anxiety and the way to use the human-centered technology, we want to introduce our proud engineering technology to them to forge a win-win relationship. Tokyo Tech have concluded the university-side agreements with 8 universities in Finland, Denmark, Sweden and Norway. In addition, DST has concluded the school-to-school agreements with the Department of Computer Science & Information Systems (or Information Technology Research Institute) and Agora Center of University of Jyvaskyla, Finland, and interacting with them aggressively.

Tampere Art Museum
Moominvalley
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Various Study Abroad System

Tokyo Tech offers various opportunities to study abroad, including exchange programs with affiliated universities, short-term programs during summer vacation, and long-term programs with credit transfer. There are many different organizations and ways to study abroad so a student can choose the most suitable one. There are also opportunities for overseas internships. Please refer to the website of the international division (overseas programs) for more details. Information on the application of these programs is regularly updated.
http://www.ipo.titech.ac.jp/exchange/send.html

Very short term overseas program

less than one month

You can experience life and learning overseas by participating in summer school and language classes during university vacations. There are also various other programs such as experiential learning forums and seminars for students to interact with one another.

Shot term overseas program

less than one month

This program provides opportunities for experiencing student life overseas and improving communication skills. It is useful for preparing those who are planning to study or work abroad on a long-term basis.

Long term overseas program

more than one year

The long-term overseas program allows more in-depth language learning and research activities. There are double-degree programs with Tsinghua University, ENPC, as well as those supported by various foundations. You are encouraged to make plans based on your vision of your future.

Internship

Those who want work internationally with a global view should gain experience by joining internship programs. Many institutions and companies in various countries offer human resource development programs. Financial support such as scholarships is also available.

Student exchange programs

For those who want to improve their language abilities as well as take courses and obtain research guidance relevant to their specializations in universities overseas, there are exchange programs with tuition fee exemptions. These programs require at least one semester but are less than one year.

Graduate school combined program between Tokyo Tech and Tsinghua University

As the leading science-and-engineering universities in Japan and China, Tokyo Tech and Tsinghua University have established academic exchange agreements since 1986. Each university sends its students to the partner university to engage in learning and research activities with an aim of obtaining double degree within a certain period.

Message from a student from Tsinghua University

En TOU

Department of Human System Science/
Department of Foreign Languages
and Literatures, Tsinghua University

When I was in Tsinghua University, my research focused on comparing the Japanese and Chinese languages. In China, we do not have “circles” like in Japan but I participated in student network management committee, Tsinghua University’s student association, and volunteering activities. I first heard about the Tsinghua University-Titech joint program when I decided to enter Tsinghua University. I found that I could obtain two masters degree in three years so I applied for the program.

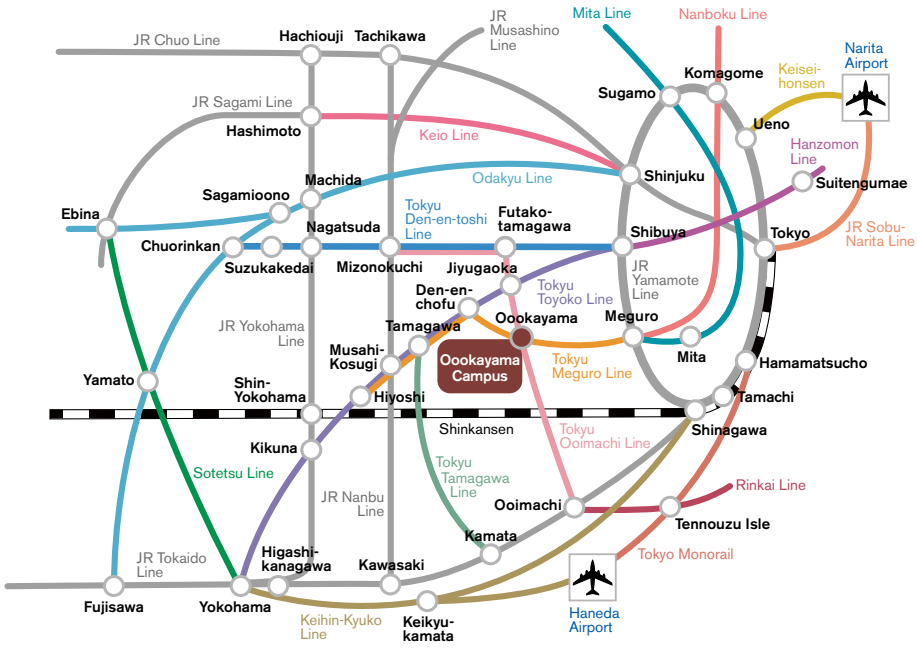
Currently, I am conducting research about the applications of calculation models for inductive inference, metaphor generation, and metaphor comprehension based on language statistical analysis in Nakagawa laboratory. Research is interesting because I can combine knowledge from various fields to derive results. Since both research activities and classes are heavy, I try to commit myself to both.

I am glad that I am able to meet many different people in Tokyo Tech. Recently, I went to Nara and Kyoto with my peers. Although it was only a three-day trip, we had wonderful memories.

When studying abroad, I think “Priority” is important. Many good and bad things happen everyday. It is up to me to consider whether they have a bad influence on me. The way I choose and prioritize the things I want to do will lead to different outcomes. I think it is important not to forget my initial goals and always keep them in my mind. This is what a friend told me and I always live by it.

I want to get a job and be independent in future. Because my parents have always supported me, I hope to repay them with my own strength. I may not always succeed, but I think it is important to persevere and not give up.

Access



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