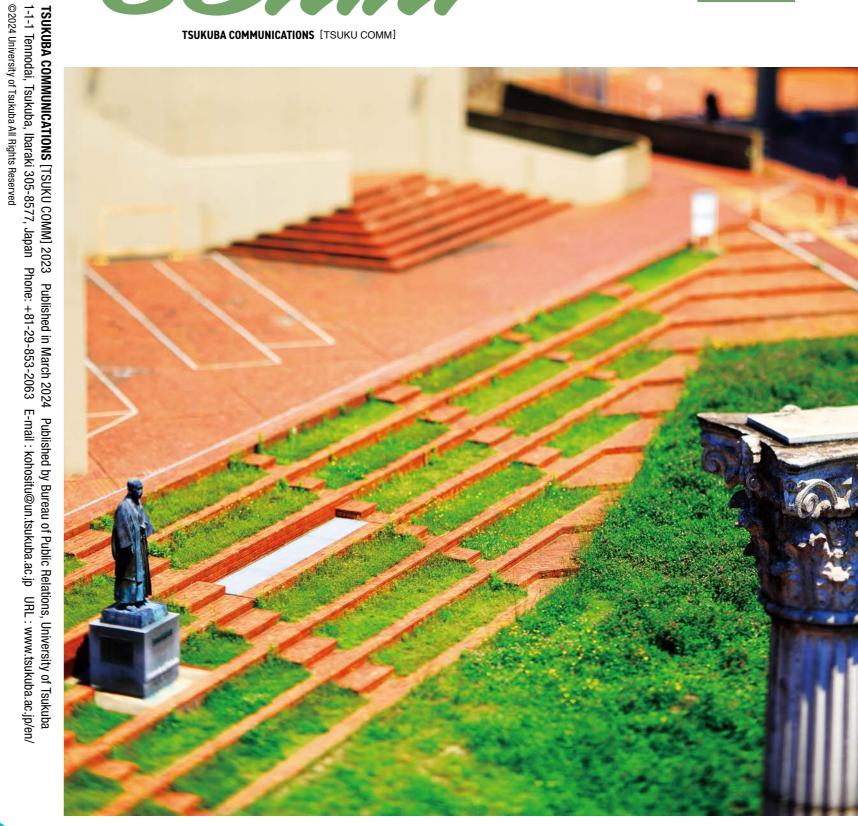
# TSUKU

TSUKUBA COMMUNICATIONS [TSUKU COMM]

50TH ANNIVERSARY OF UNIVERSITY OF TSUKUBA

Autumn Sports Day

SOHOSAI-School Festival of University of Tsukuba









### ISUKU,

### **TSUKUBA FRONTIER**

New Art Education to Verbalize One's Inner Self: — 04
Toward a Broader Art Appreciation for Understanding Diversity
Institute of Art and Design, Professor

### **ISHIZAKI Kazuhiro**

Institute of Pure and Applied Sciences, Professor

YAMAMOTO Yohei

**Exploring "Moderate Trust" between Humans and Al** — 08 Desirable Al Regulations in Legal and Behavioral Science Institute of Business Sciences. Professor

KIMURA Makiko

**Faster, Economical, and Unique Supercomputers** — 10 Codesigning Creates Top-Level Performance

Center for Computational Sciences, Professor / Director

**BOKU Taisuke** 

### **TSUKUBA ALUMNI**

HykeComic, Inc.

TAKATORIYA Akira

Graduated from the Faculty of Humanities, First Division, 2007

Art teacher, Senior High School at Otsuka, University of Tsukuba

KOMATSU Shunsuke

Completed in the Doctoral Program in Art and Design, Graduate School of Comprehensive Human Sciences, 2014

Shanti Volunteer Association
Laos Office Coordinator

ASAGI Mariya

Completed Master's Program in Physical Education, Health and Sport Sciences, Graduate School of Comprehensive Human Sciences, 2017

Photographer

FUNAO Osamu

Graduated from the College of Biological Sciences, Second Cluster of Colleges, 1984

### **CAMPUS LIFE STORIES**

International Social Sciences, College of Social Sciences, School of Social and International Studies

Nauyen Thuy Anh — 16

Tsukuba International Academy for Sport Studies (TIAS 2.0), Master's Program in Sport and Olympic Studies, Degree Programs in Comprehensive Human Sciences, Graduate School of Comprehensive Human Sciences

Elizabeth Bergen-Bartel — 16 School of Science and Engineering, Bachelor's Program in Interdisciplinary Engineering

Pakorn Wangsuekul — 16

Master's Program in Materials Innovation, Degree Programs in Pure and Applied Sciences, Graduate School of Science and Technology

Liao, Hsin-Yen

College of Medical Sciences, School of Medicine and Health Sciences

Chaeyeon Lee — 1

Doctoral program in History and Anthropology, Degree Programs in Humanities and Social Sciences, Graduate School of Business Sciences, Humanities and Social Sciences

Chen Min ————

Interdisciplinary Program in Life and Environmental Sciences, College of Biological Sciences, School of Life and Environmental Sciences

Park Kiwon

Master's Program in Biology, Degree Programs in Life and Earth Sciences, Graduate School of Science and Technology

Yu, Cheng-Han

College of Comparative culture, School of Humanities and Culture

Jooeun Yoon

College of Knowledge and Library Sciences, School of

Wu Bogian —

Intelligent Engineering Major, College of Engineering Systems, School of Science and Engineering

Meng Liyuan

Doctoral Program in Policy and Planning Sciences, Degree Programs in Systems and Information Engineering, Graduate School of Science and Technology

Ren Yihan —

Master's Program in Education, Degree Programs in Comprehensive Human Sciences, Graduate School of Comprehensive Human Sciences

Yina Shin — 19

School of Physical Education, Health and Sport Sciences **Du Xin** — 19

College of Psychology, School of Human Sciences

of Science and Technology **Suharman** 

The University of Tsukuba's public relations magazine TSUKU COMM ceased print publication, transitioning its contents introducing researchers, alumni, and current students to an online format. This is a compilation magazine to encompass one year's worth of articles.

12 | TSUKU COMM | 03



## New Art Education to Verbalize One's Inner Self:

**Toward a Broader Art Appreciation for Understanding Diversity** 

Art works are no longer to be enjoyed quietly and alone

Even if you unaware of the history or techniques by which an artwork is created, you should be able to conceptualize what you feel about it and talk about it with others. Everyone should have their own interpretation of an artwork. We have developed tools that anyone can use to guide them in their appreciation of art, and we propose new means of dealing with art.

### Everyone has their own way of interacting with art

Arts and crafts classes and art lessons once focused on creating one's own works of art and expressing one's own individuality. How many people now, however, continue to engage in expressive activities after they finish their schooling? Instead, they are more likely to become familiar with works of art by means of museums and events. In contrast, even in reference to works that are considered masterpieces, we often find ourselves at a loss as to how to appreciate them and what to appreciate, when we stand in front of them. What is lacking is the ability to appreciate them. This can be learned in one's schooling, of course, but it is never too late to begin to appreciate art, even as an adult.

Each person experiences something different in a work of art. This can be an opportunity for the viewer to reflect on their own feelings and way of life or to try to understand those of others. Setting aside the historical background of the work and the artists' intentions, contemporary society and the viewer's own situation can change the meaning of the work. Therefore, it is natural for each viewer to have a different interpretation of an artwork, and it is important to recognize these differences.

### Providing a foothold for art appreciation

Thus, there is no right way to appreciate a work of art, but even so, it is important to find a way to gain a foothold in one's own appreciation process. A variety of tools can help you take that first step. For example, without going to a museum, one can look at postcards reproducing works of art to identify the elements, colors, shapes, and so on that are depicted on the postcards. This does not require any knowledge of art that is difficult to attain. There is no need to immediately critique a given work or discuss your impressions of it. In addition, if a school teacher or other facilitator can act as a dialog facilitator, you can discover the things that you are most interested in.

The mechanism of this tool is simple and full of handmade features, but it is a better tool for drawing out language rather than simply looking at the artwork would be. Using these tools in trying different ways of viewing artworks, you will find your own favorite ways of doing so, and your repertoire of viewing options will increase. Art museums themselves have



### Ishizaki Laboratory, Institute of Art and Design, University of Tsukuba

Based on findings in learning science, we are examining a visualization strategy model of thinking to support depth and breadth in art appreciation and empirically explore support tools and learning methods that use this model. In particular, we are focusing on metacognitive support in structuring art appreciation skills based on the relationship between the elements of artworks and response behaviors, enabling the viewer to utilize their skills to monitor and control their art appreciation. Further, for this purpose, we are developing digital tools to support metacognition.



been developing similar tools and holding workshops to provide more diverse ways of enjoying art, and opportunities of acquiring art appreciation skills are growing.

### Appeal of art appreciation grounded in verbalization

The key here is to verbalize. By expressing one's ideas in words rather than merely feeling a certain way, the feeling of being moved or shocked by a work of art can interact with the visual image and what one says to further deepen and deepen one's thinking. In communication with others, we can share our thoughts and feelings, and by allowing for differences, we can see new value in a work of art. This is the fascination of art appreciation. It is impossible for this to happen between the artwork and its creator alone. The viewer is an indispensable part of the art.

Verbalization is also a skill that has been emphasized in education in recent years. If art education provides training in verbalization, this will lead to the cultivation of comprehensive skills that covers each subject area. Against this backdrop, greater efforts to promote art appreciation are being made.

### Toward creative art appreciation

The subject of art incorporates a wide range of creativity.

The acronym ART, standing for artist, researcher, and teacher, has been attracting attention to the tendency to move away from traditional production-centered education to one that includes a lifelong education perspective promoting educational practices



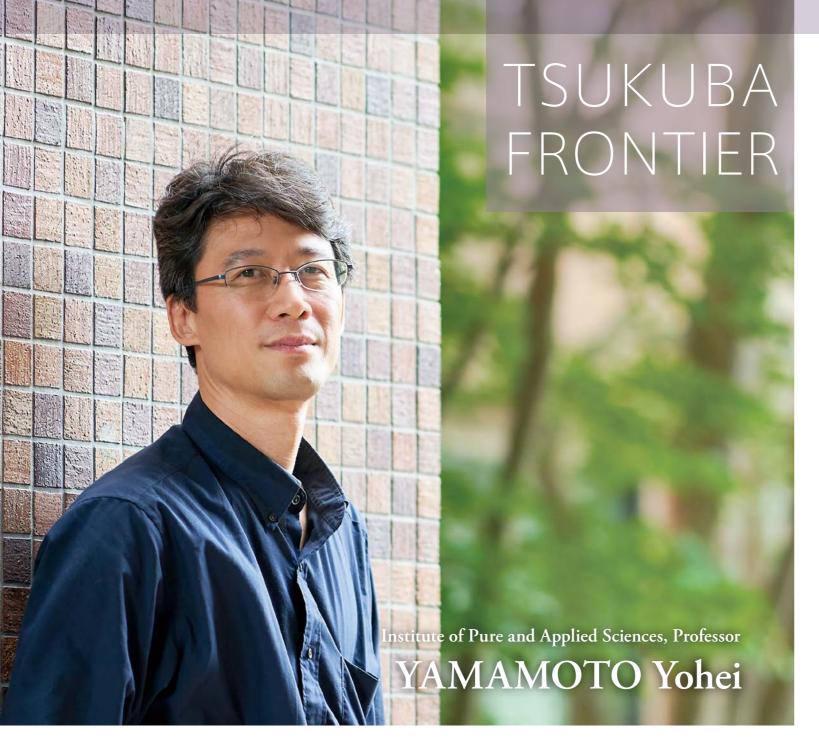
from these three perspectives. Art education that focuses on art appreciation actually forms a new field of research.

Art appreciation is active, not passive. It is a creative activity and form of self-expression that allows each individual to express their own individuality, just as in the creation of artworks. Artworks in new styles are becoming more common, such as in the form of immersive exhibits, works that are combined with video images and those that allow the viewer to enter a virtual space, which requires new ideas for appreciation support tools. The world of art appreciation is being expanded with the aim of bringing more people into contact with art and enriching their lives through artworks.

#### **PROFILE**

Ph.D. in Art and Design from the Graduate School of Art and Design, University of Tsukuba. He was an Assistant Professor at Akita University, Visiting Scholar at Ohio State University, Associate Professor at University of Tsukuba before assuming his current position.

"Aesthetic development in cross-cultural context: A study of art appreciation in Japan, Taiwan and the United States," Studies in Art Education, 43(4), 2002, A Study of Development and Repertoires in Learning about Art Appreciation (Kazama Shobo, 2006), "Study of Repertoires in Writing about Art," The Journal for Japanese Association of Art Education, 27, 2006 (received the "Art Education" Award), Visualizing and Deepening Thoughts in the Learning Process of Art Appreciation (Toshindo, 2022).



# **Assembling Molecules Revealed Emerging Novel Functionalities of Materials**

**Unique characteristics by creating desired shapes** 

The size of a single molecule is on the nanometer scale. Molecules must be assembled into larger aggregates to use them as conventional materials. Depending on the conditions, molecules can be assembled into various shapes, providing different functions depending on the shape. One of the unique shapes is sphere. Combining chemistry with physics and biology opens up the possibility of revealing micrometer-sized spheres.

### Trapping light in a sphere

It may seem challenging to collect molecules to form a sphere, but in reality, it is not very difficult to shape them into a sphere via self-assembly. When a compound is dissolved in a solution, and a nonsolvent is slowly added, the molecules aggregate and precipitate. Some molecules form not only aspherical aggregates but also angular crystals.

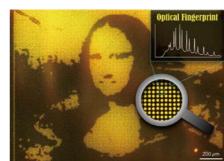
When light is projected on a microsphere, we can observe luminescence inside the sphere. Light is reflected off the walls of the sphere and circulates within. In other words, light is trapped inside the sphere. This is known as "whispering gallery" phenomenon. It is named after the phenomenon observed when someone whispers inside a large circular dome, such as inside St. Paul's Cathedral, London, the sound wave from the whisper travels through the wall and is heard by people on the other side of the dome.

The same phenomenon occurs inside the microsphere. The light trapped inside the sphere resonates and emits a light with specific wavelength and sharp line width. This small light source can be used in devices such as optical memories and sensors. Since the color depends on the wavelength of the light, it is possible to extract signals of multiple colors; thus, making multiplexed communication possible.

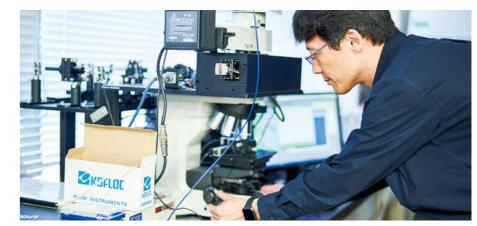
### Charm of Microscopic Materials

Since the early 2000s, there has been much focus on the development of materials with controlled molecular structures at the nanoscale; however, the slightly larger micrometer-scale materials have a different appeal. When working with molecular aggregates, the shape and arrangement of the molecules are important.

The advantage of micrometer-scale materials is that they can be observed reasonably well with an ordinary optical microscope. Electron microscopes are unsuitable for observing molecules whose assembling structures change by vacuum



Painting of an optical memory created with microsphere (Materials Horizons, 2020)



 $\begin{tabular}{ll} Yamamoto \cdot Yamagishi Group (Molecular Assembly and Optics Laboratory), \\ Institute of Pure and Applied Sciences, University of Tsukuba. \\ \end{tabular}$ 

Developing research on the construction of molecular nanomaterials consisting of  $\pi$ -conjugated organic molecules and polymers and applying them in nanodevices for photoelectric functions and energy conversion Emphasis is on the control of molecular assembly structure, arrangement and orientation, and the expression of their functions.



drying. Meanwhile, using an optical microscope, you can observe the state, shape, and luminescence of the materials easily. The easy observation of objects is also an important factor when conducting a research.

### Interdisciplinary exchange with a smile

Our research on microspheres began by coincidence. While investigating the aggregate structure of conductive polymers, we obtained spheres and learned that spheres have unique properties. Furthermore, during joint research with a German physicist, we discovered the phenomenon of light resonance within the sphere. Discussions with other researchers in physics, a field that I had not explored much before, led to a new research theme: microspheres and light.

We examine many types of materials in our research, but not all of them can be synthesized by ourselves. I actively participate in academic conferences and exhibitions to constantly learn about new research results, and when I find a material that looks interesting, I approach the researcher who is working on it. I sometimes ask for help from other specialists in measuring the physical properties of materials. Approaching them with a smile usually helps me get their cooperation. Each researcher has a different research objective, so if we learn something new, it is mutually beneficial. This kind of interdisciplinary exchange within and beyond the university is a part of our research.

#### Beyond the light

Research does not always proceed smoothly, and we often encounter difficulties: we

plant several "seeds" in the next five years or so, and if even one of them blossoms, the research project is a success. Sometimes we start from an idea or a fantasy, but communication with students also opens a treasure trove of ideas. It is stimulating to receive unexpected research reports.

Over the past decade, we have been vigorously researching optical applications using microspheres, but recently we began exploring developments other than optical devices using microspheres. One of them is related to the fields of biology and environmental science. If biodegradable natural polymers can be formed into spheres, they can be used for toiletries or medical applications. Since microbeads made of synthetic polymers leak into environment and cause problems, there is a great need to switch to natural materials, and this will be a promising contribution to the society. I am also interested in completely different fields such as marketing and management, and ten years from now, I may be taking on completely different challenges.

I want to do something that I have never done before—that is my main motivation.

#### PROFIL

2003 Doctor of Science from the Department of Chemistry, Graduate of Science, Osaka University.
2004–2010 Research Fellow of ERATO and SORST projects, Japan Science and Technology Agency.
November 2010 Associate Professor, University of Tsukuba February 2018 Professor, University of Tsukuba January 2022 Established "MyQtech Inc.," a venture company originating from the University of Tsukuba, aiming at the social implementation of the research conducted at the university.

His motto is to make research fun and exciting. However,

his recent motto is "As a researcher, you should question everything."

15UKU COMM



## **Exploring "Moderate Trust"**between Humans and Al

**Desirable AI Regulations in Legal and Behavioral Science** 

In recent years, the progress of artificial intelligence (AI) and robotics has been remarkable, prompting discussions about regulations and governance as automation becomes increasingly prevalent. Amid this progress, there exists a tendency among humans to either unquestioningly embrace these machines or conversely, harbor a strong aversion towards them. Integrating insights from behavioral science becomes crucial in shaping the future legal framework governing the responsible and appropriate utilization of AI.

### The Intersection of Automation Technology and Law

Consider online shopping where a computer algorithm operates without human intervention. This challenges the traditional understanding of contract formation outlined in the Civil Code. The ambiguity arises in discerning whether a sales agreement is actually established in such online transactions. Additionally, in systems where users input personal information leading to personalized product suggestions, users remain unaware if the system is programmed to steer them toward specific choices.

As automation through robots and AI advances, numerous legal issues emerge, spanning various domains such as contract, intellectual property, personal information protection, and constitutional laws. For instance, in the event of an accident caused by an automated vehicle, determining responsibility—whether it lies with the driver, manufacturer, or seller—requires a nuanced examination of the causal relationships among various events. However, the opaqueness of AI computational processes, particularly in technologies like machine learning and deep learning, presents challenges in making legal determinations.

### Considering Human Bias in Regulation

To address these challenges, preemptive regulations are under consideration. This approach involves establishing ethical principles for AI in its developmental stages to mitigate risks. Legal experts highlight the concerns associated with poorly understood algorithmic content, prompting engineers to question the acceptability of relying on such algorithms for convenience and development risk management.

However, human biases remain elusive. Studies on behavioral science notes that individuals tend to exhibit biases or cognitive patterns at both extremes: an excessive trust and reverence for AI or a complete distrust and aversion toward it. Defining





Business Law Group, Institute of Business Sciences, University of Tsukuba

Amidst substantial shifts in the corporate landscape, such as globalization, IT advancements, and the reinforcement of compliance and governance, our research aims to provide pragmatic, theory-based solutions to the legal challenges faced by corporations. Furthermore, we endeavor to translate our research findings into practical policy proposals to benefit society at large.



a "moderately trusting relationship" with AI is complicated because attempts to mitigate bias often involve inherent biases. Consequently, a new avenue of research has emerged, focusing on framing laws and regulations based on the premise that human judgment inherently contains biases, using findings from behavioral science.

### Toward a New Legal Research Method

Initially, my research focus revolved around the validity of contracts based on automated algorithms, stemming from a sense of urgency triggered during my tenure at a securities firm. Working within the jurisprudential framework, I applied the "comparative method," delving into precedents from various countries and analyzing the emerging laws and their contextual backgrounds. This exploration led me to examine the influence of AI and other emerging technologies on the regulatory framework governing business transactions and investment behavior.

What captivated me was the innovative prospect of integrating human behavior and cognition traits into the AI regulation. Behavioral science, already influential in economics and diverse fields, holds promising prospects for future development within jurisprudence.

#### Contemplating Limits and Purpose

There have been suggestions to pause AI development until certain safeguards are established. Simultaneously, there is a need

for a deliberation regarding the extent to which AI should be integrated. While fully automated cars offer convenience, some may resist them due to the loss of the joy of driving. Ignoring human nature and the intent behind automation may diminish human agency. Substantial automation might lead to overregulation or insufficient vigilance, resulting in adverse consequences.

Robots and AI are tools for human life and activity. Rather than entrusting everything with them, there is a necessity to distinguish what should be delegated, aiming for a symbiotic relationship between people and machines. To achieve this, standards, regulations, and insights from various research disciplines and public opinions, not just limited to legal and engineering perspectives, need consideration. Engaging behavioral science stands as an initial step in this direction.

#### **PROFILI**

After graduating from Tsuda College, Faculty of Arts and Sciences, and gaining experience in a foreign securities firm, she pursued further education at the University of Tsukuba. Starting with the Master's Program in Advanced Studies of Business Law, she pursued the Doctoral Program in Systems Management and Business Law. She has served as a Professor for the Master's Program in Advanced Studies of Business Law at the University of Tsukuba, focusing on commercial law, corporate law, and financial instruments and exchange law. Her work primarily revolves around analyzing the intersection between law and technology, with a recent emphasis on incorporating insights from behavioral science into legal analysis. She has published a paper titled "Applying Behavioral Insights to the Design of Securities Regulation," in the Tsukuba Law Journal.



# Faster, Economical, and Unique Supercomputers

**Codesigning Creates Top-Level Performance** 

Supercomputers, essentially high-end personal computers (PCs) interconnected by the tens of thousands, embody simplicity in concept but complexity in execution.

The challenge lies in developing a supercomputer that stands unparalleled in its ability to handle diverse scientific and engineering computations, propelled by multiple innovations, including advanced interconnect networks that elevate its performance to "super" levels.

### The world of supercomputers: proximity contradicted by distinctiveness

In today's digital age, computers are ubiquitous, yet supercomputers remain a distinct entity. Often perceived as exclusive tools for specialized research, supercomputers share fundamental components and principles with standard PCs. The difference lies in their configuration: hundreds or even tens of thousands of high-performance computers are connected via an interconnection network to divide and conquer tasks, enabling them to solve tasks that would take years on a conventional PC in a day. This extraordinary capability warrants the "super" designation.

Unbeknownst to many, supercomputers play a critical role in everyday applications such as artificial intelligence (AI). AI systems, now more familiar to the public, rely on supercomputers to learn from vast datasets and deduce the most significant relationships and information in response to queries. Therefore, a balance between computation time and communication time must be considered depending on the problem in question. Moreover, the balance varies on different types and ages of supercomputers. Each supercomputer has its own characteristics.

### The ascendant role of GPUs

Traditionally, the central processing unit has been the heart of a PC. However, in the realm of supercomputing, graphics processing units (GPUs), initially designed for rendering graphics in gaming and other visual applications, have assumed a pivotal role because they are connected by a special interconnection network, which helps them achieve higher performance than the central processing units. Supercomputers leverage GPUs for their superior computational capabilities, especially for scientific calculations and as accelerators to enhance



In a notable achievement, the supercomputer "Pegasus' at CCS was recognized as the most energy-efficient supercomputer in Japan as of November 2023, highlighting the center's commitment to sustainable high-performance computing.



#### Center for Computational Sciences (CCS), University of Tsukuba

The CCS at the University of Tsukuba is a hub for advancing research across a broad spectrum of scientific disciplines. These include particle physics, astrophysics, nuclear physics, nanoscience, life sciences, environmental science, and information science. The center is committed to the development of high-performance computing systems and networks to push the boundaries of innovative information technology. Furthermore, CCS is instrumental in creating computer systems that support this diverse research and in exploring advanced computer application technologies. Operating under the "Advanced Interdisciplinary Computational Science Collaboration Initiative" (AISCI), the center extends its facilities to external researchers, fostering a collaborative environment.

AI and simulation tasks. Notably, the absence of GPUs in Fugaku, Japan's premier supercomputer launched in 2020, has been a point of contention, as GPU-enhanced supercomputers in the USA have surpassed their performance in just a few years.

The University of Tsukuba's Center for Computational Sciences recently unveiled "Pegasus," a cutting-edge supercomputer outfitted with 120 high-performance GPUs across 120 computers, connected through a state-of-the-art interconnection network. Unique in its incorporation of nonvolatile memory, which retains data without power, Pegasus, despite its compact size, is poised to significantly advance research in scientific computation, engineering, and AI by efficiently processing vast data volumes.

### The key is "Codesigning"

Merely enhancing hardware performance does not unlock the full potential of a supercomputer. Its true value emerges when the computational tasks are tailored to the system architecture, emphasizing the importance of aligning with user needs. This necessitates a codesigning approach in which developers and users collaborate closely on system design and application programming. Achieving top-level performance hinges on a mutual understanding of the users' computational requirements and hardware capabilities, thus fostering the most effective use of supercomputing resources.

The University of Tsukuba fosters an environment conducive to codesigning, uniquely housing both supercomputer development and research under one roof. Among the nine national universities in Japan with supercomputer centers, only Tsukuba boasts such an integrated research

ecosystem, significantly enhancing its global research standing.

#### As a unique supercomputer center

Despite being a relatively new and small supercomputer center, the University of Tsukuba strives to offer original and specialized supercomputers such as Pegasus and its predecessor, Cygnus. Serving as a joint research facility open to national researchers, over half of its users come from external research groups. Access to supercomputers is highly competitive, with usage contingent on passing a rigorous peer review process.

In the contemporary landscape, supercomputers are vital across all research fields. However, with higher performance comes greater energy demand, making energy efficiency as crucial as computational speed. The rapid generational turnover of supercomputers also necessitates cost-effective development. Among these challenges, our mission is to continue delivering outstanding results by balancing multiple demands and converting inherent pressures into a driving force for advancing supercomputing.

#### PROFII

Holding a Ph.D. in Electrical Engineering from the Division of Science and Technology at Keio University Graduate School, the individual began his career as an Assistant Professor in the Department of Physics, Faculty of Science and Technology at Keio University. Later, he transitioned to the University of Tsukuba, where he has dedicated over three decades to research. In 1996, he played a pivotal role in developing the massively parallel inte the CP-PACS system, leading to the creation of the world's highest-performing system at that time. Currently, he is the Director of the Center for Computational Sciences (CCS) at the University of Tsukuba. An acknowledged expert in supercomputer systems and application programming, he has contributed to the steering and organizing committees of major international high-performance computing conferences and various governmental committees focused on supercompute development and operation under Ministry of Education, Culture, Sports, Science and Technology.

### TSUKUBA ALUMNI

HykeComic, Inc.

### **TAKATORIYA Akira**

Advantages of studying at the University of Tsukuba in my career and life

Currently, I am in charge of sales for webbased cartoons, also known as webtoons. I am responsible for requesting various publishers to distribute our content and for working collaboratively with companies that license our characters. When I was a student, I used to stay up until midnight watching anime and reading manga with my friends before going to class the next morning. This experience has been extremely influential in my current position. Additionally, it was an opportunity to learn about lesser-known international works.

The use of a degree in humanities may be unclear to some, but I believe that history, which was my major, can be studied horizontally in various fields to reach a comprehensive conclusion or perspective. In addition, having worked in Middle Eastern countries, I believe that the knowledge of history is foundational for understanding and working in foreign countries. We must therefore study the humanities. These are the reasons I advocate for "Fighting Humanities."

### My Fondest Memories as a Student

Each day was extremely fulfilling. I enjoyed interacting with my peers who shared my values and interests and had a deep thirst for knowledge. My major was Chinese and a little Turkish history, and my circle included history nerds from Japan, the East, the West, as well as geology students. We gathered in the library's musty basement, where few students go, to read history books. Our conversations in the cafeteria remain a source



### The "Fighting Humanities" **Enter the Global Arena**

of inspiration for me even today. The city of Tsukuba has been described as an isolated island on land, but it is in its nurturing environment that I spent four intensive years of education.

One of my most vivid memories is of drinking with friends by the Matsumi Pond (a campus pond) and doing the fire punch with 98% Spirytus (vodka) on our arms. We all jumped into the pond to extinguish the fire as the flames refused to die out. Yes, it made no sense. My four years here were like a "Men's festival"; there was nothing akin to romance. Alternatively, I may have experienced these emotions from watching cartoons and anime. In a sense, I became a more complicated person during those days, but that was inevitable. I believe I have done

### Message to Students of the **University of Tsukuba**

The University of Tsukuba is the best place to learn, and in retrospect, it appears that all I did was study there. The library is wellstocked, and the professors are approachable. You will be rewarded for your efforts. Students live in the same dormitory, allowing you to spend more time together and make close friends. Please read the numerous valuable books in the basement of the library and become a globally competent individual.

### PROFILE TAKATORIYA Akira Graduated in 2007 from the Faculty of Humanities, First



### **TSUKUBA** ALUMNI

Art teacher, Senior High School at Otsuka, University of Tsukuba

### **KOMATSU Shunsuke**

Advantages of studying at the **University of Tsukuba in my career** 

High school art classes cover various areas, including not just painting and sculpture but also design and visual media. I specialized in sculpture, and the University of Tsukuba provided an ideal setting for production. The campus was expansive and offered a flexible, enriching environment for every student.

Graduating from the university and immediately becoming a successful artist seemed ambitious. Therefore, I pursued further studies at the graduate level. My aim was to equip myself for a postgraduation scenario where I could continue creating art, possibly initiating a startup. Presently, while I engage in various artistic endeavors, I feel my achievements are not yet at a level I can be wholly proud of. I navigate two roles, that of an artist and an educator, along with conducting individual exhibitions. For instance, my most recent exhibition featured works inspired by my journey to Antarctica.

### My fondest memories as a student

My most memorable experience as a student occurred toward the end of my Master's program when the Great East Japan Earthquake struck, canceling our commencement ceremony. In response, our faculty and fellow students, uncertain of what to do, decided to take action by securing shelves amidst ongoing aftershocks.

Following this, I started an exchange and support initiative using artwork for a reconstruction project in Minamisoma City, Fukushima Prefecture. This handson involvement provided insights that



### **Art Teacher Goes to Antarctica**

conventional lectures could not offer, highlighting the intrinsic relationship between art and society. I occasionally question whether my efforts genuinely contributed to the recovery, but I firmly believe it was more meaningful than remaining idle in distress.

### Message to Students of the **University of Tsukuba**

While fulfilling a student's life is pivotal, I urge you to explore beyond the university confines. At the University of Tsukuba, students have the opportunity to enroll in diverse classes beyond their primary field, specifically during the initial years. However, beyond this stage, it becomes crucial to actively seek out opportunities to engage with the external world, as these will not be readily available.

My most impactful experience during my student years was assisting an individual working on a production at the foothills of

Mount Tsukuba. This exposure to an entirely different culture left a profound impact on me. Moreover, participation in a teachers' exchange program in Antarctica prompted a reevaluation of my use of stone in sculpting. Stone, enduring for millions of years, represents the very essence of our planet. Therefore, broadening horizons beyond university learning is essential, allowing the application, and evolution of the knowledge gained.

#### PROFILE KOMATSU Shunsuke

Born in Fukushima Prefecture Completed the Doctoral Program in Art and Design in 2014 from Graduate School of Comprehensive Human Science Current position: Art teacher, Senior High School at



### TSUKUBA ALUMNI

Shanti Volunteer Association Laos Office Coordinator

**ASAGI** Mariya

Advantages of studying at the **University of Tsukuba in my career** and life

Currently, I am engaged in supporting education and activities related to water, sanitation, and hygiene for children of ethnic minorities in Laos. Rather than working directly with children, I support training programs for teachers in cooperation with local government officials.

When I was in junior high school, I heard many stories from a teacher who was a member of the Japan Overseas Cooperation Volunteers and became vaguely interested in foreign countries, particularly developing countries. I may have been influenced by an environment with values such as "the best is to graduate from a local university and work in your hometown."

I majored in education at the university and was interested in children's play and what it meant for people to be immersed in something. Because play involves physical activities and sports, when I heard that the University of Tsukuba was starting a new graduate program, "Joint Master's Program in International Development and Peace through Sport," which aims to promote international cooperation through sports, "This is it!", I thought. To be exact, I was a student in the "0th Generation," i.e., before the program officially started. Through this program, I was able to gain a perspective on how support should be provided to the many children in refugee camps and play programs, etc.

I had to do an overseas internship as a course requisite and spent a year working in a refugee camp in Thailand, considered a leave of absence from school. Later, I got a job at the support organization with which I



### The 0th Generation Pioneer: The Way of International **Volunteers**

did my internship. There are many situations where what I learned at university does not apply in the field, but I feel lucky that I was able to find the job I wanted in the shortest possible time.

#### My fondest memories as a student

I was so busy trying to keep up with my academics that I could not have any student-like "screw-ups;" and I feel I could have enjoyed my student life a little more. Nevertheless, the program itself was just starting up, so I had an opportunity to explore my interests. I was one of only two students in the program, so, I often took classes with international students at the newly founded Tsukuba International Academy for Sports. Some of the international students had experience working in the business world and some were athletes who had played competitive sports, so I was able to gain knowledge from various perspectives. It was a great experience for me to simulate what it would be like to work overseas and in a different culture.

### **Message to Students of the University of Tsukuba**

The University of Tsukuba is a university where you can really experience many things. In addition, various networks and sources of information that are stimulating and offer many opportunities are readily available. There are many opportunities to engage with various people and broaden your values and thinking, so I encourage you to exploit them.

#### PROFILE ASAGI Mariya

Born in Ehime Prefecture, Japan Completed Master's Program in Physical Education, Health and Sport Sciences, Graduate School of Comprehensive



### TSUKUBA ALUMNI

Photographer

### **FUNAO Osamu**

Advantages of studying at the University of Tsukuba in my career and life

The story about how I became a photographer after graduating from the College of Biological Sciences is long. I loved insects as a child and was fascinated by the wonder of every tiny living system. I am interested in ecology and in exploring the relationships between discrete organisms, which is why I chose to study environmental biology. Genetic engineering was trending when I entered university, and colleges offering environment-related courses were still rare. I took my first serious documentary photographs after graduating from university and when I was living with native tribes in the African rainforest. As I touched these people living off the earth's bounty, living as hunter-gatherers without agriculture, I realized that their lifestyle was very connected to my studies at university. This experience helped me consolidate my desired

A nature exploration club was active at that time at the University of Tsukuba. I joined it and began mountain climbing with an exciting group of people who wanted to perform activities that many did not endeavor. After I graduated, I joined a working people's mountaineering club and attempted to master climbing. The first overseas mountain I climbed was Mount Kilimanjaro in Africa. My present career actually began with that trip.

### My fondest memories as a student

I moved into a dormitory when I entered the University of Tsukuba. It was the first time I



### **Pursuing My Passions**

lived away from my parents. I spent time with my friends almost daily: we cooked meals together, which was a delightful experience. Students from all over the country came to the University of Tsukuba along with some international students. This diversity was interesting and extremely stimulating.

It was still rare to travel abroad at that time. I wanted to visit the Himalayas and such locations, but I did not have the money, so ultimately, I could not travel to my favored destinations. However, I had this vague feeling at that time that I could venture outside Japan and accomplish some feat. It is too late for me now, but if I had gone abroad and met someone as a student, I could have achieved other possibilities, and not become a photographer.

### My message to students attending the University of Tsukuba

I may not represent a supportive senior. However, you must not focus merely on your studies as you attend university. I would like you to experience your interests and follow your fascinations wholeheartedly. It is perfectly fine if it is just a passing interest.

Just because you graduated in science does not imply that you must obtain a job in the sciences; the same is true for the humanities. Professional schools for photographers exist, but they can only teach you the skills. You must yourself work out what you want to photograph. Even if your pursuits do not lead you directly to a job, they will definitely help you in some manner in the future. I can certainly assert this fact with confidence!

PROFILE FUNAO Osamu Photographer Born in Hyogo Prefecture Graduated in 1984 from the College of Biological Sciences Second Cluster of Colleges



### **Nguyen Thuy Anh**

International Social Sciences, College of Social Sciences, School of Social and Internationa Studies From Vietnam



(1) When I first arrived in Tsukuba City, I was amazed by the name "Science City" that the city has. I had the chance to visit many museums and exhibitions in the city and I love the idea of exhibiting inventions which are unique and interesting. I also enjoy the parks and the nature sightseeing in the city. About Tsukuba University, I enjoy the academics study where I can have fruitful discussions with classmates and professors. The club activities such as music club, sport clubs and socializing clubs are interesting and exciting. I also met so many international friends and made friends with Japanese students as well.

② About academics, I wish to fulfill my 4 years in the University and acquire scholarships to be a financially independent student.

For extracurricular activities, I want to join as many clubs as I can and experience different kinds of activities. I'm also a guitarist so I'd love to join music clubs. I also made a lot of friends through socializing clubs such as CASA and Omochi. For social contribution, I'm going to become the leader of NMUN Tsukuba so I hope I could fulfil my role to lead the delegation team of Tsukuba University to Washington DC.

### **Elizabeth Bergen-Bartel**

Tsukuba International Academy for Sport Studies (TIAS 2.0), Master's Program in Spor and Olympic Studies, Degree Programs in Comprehensive Human Sciences, Graduate School of Comprehensive Human Sciences From IISA



① The University of Tsukuba provides incredible experiences of growth in an ideal environment for cultivating (文武 不岐), BunBuFuKi, or "the unitive way of scholarship and warriorship". Tsukuba provides the perfect conditions for excelling in both academic and physical disciplines which in unity, lead towards harmonious futures. One element I've truly enjoyed is the university library system which provides a door to access extensive knowledge that would have otherwise been shut to me. Studying here has allowed my love of Budo to flourish

while simultaneously providing an academic environment to optimize self-development. I will forever cherish the time learning from our superior Kendo teachers and the incredible kenshi of the university club. I'm deeply grateful to have studied in the Budo Laboratory, learning from Sakai Sensei and Ohishi Sensei. Even though my Japanese is poor, the vast wisdom from esoteric Budo resources continually inspires me. Interactions with all the teachers and diverse student population has enriched my life immensely.

2 My focus has been on my passion for learning and divergent research interests. I hope that my future research will benefit our collective. With the remainder of my time, I hope to become conversant in Japanese and will do my best to pass the 6thDan examination in Kendo. There is an urgent need for authentic compassion in all aspects of our systems and society. Compassion comes through understanding and connecting ourselves to the complex struggles of others. To imagine a better future and effectively build, we must remember that it can only be done through creating meaningful connections. As Kano Jigoro Sensei believed, Budo can enhance mutual cultivation, connecting Earth's people harmoniously. If there is only one aim in my life, it is to carry his torch: the disciplined dedication to creating harmony in thought and action.

### Pakorn Wangsuekul

School of Science and Engineering, Bachelor's Program in Interdisciplinary Engineering From Thailand



Nestled comfortably between the sprawling city of Tokyo and the lush mountains of Ibaraki Prefecture lies Tsukuba. As a student at the University of Tsukuba, I've been fortunate to experience the best of both worlds: the convenience and accessibility of living near the bustling capital, while also enjoying the peace and tranquility of a more rural setting.

Whether it's cycling up Mt. Tsukuba to watch the sunrise or meeting friends for sports and games, there's always something to do in this cozy community. The juxtaposition of the friendly and vibrant people — many of whom stem from international backgrounds — against the relaxed and laid-back atmosphere of Tsukuba enables this small city to develop its own character; a place I'm grateful to call home for the past three years.

2 The Interdisciplinary Engineering program has provided the opportunity to gain experience in academic research at the undergraduate level through "Project-Based Learning" — a core principle of the program — which requires the combination of skills and knowledge from various fields of study. This multidisciplinary approach means that I am currently conducting research in organic semiconductor devices as well as mechatronic rehabilitation devices; with which I hope to make a meaningful contribution to the scientific and engineering community. I have a particular interest in the field of aviation and plan to utilize my time as a student here to gain the skills and experience necessary to become a pilot and pursue a career in aviation engineering. Since the educational program facilitates and promotes gaining real-world experience, I've had the opportunity to pursue internships and work experiences on topics in which I am interested. These possibilities are important steppingstones that allow me to discover the intricacies of different fields of study, enabling well-informed decisions to be made in the future.

### Liao, Hsin-Yen

Master's Program in Materials Innovation, Degree Programs in Pure and Applied Sciences, Graduate School of Science and Technology From Taiwan



1 I am amazed by the environment and the beauty of nature in all seasons here in Tsukuba. The lifestyle in Tsukuba is comfortable and livable, and the University Tsukuba is a globally renowned institution, the tranquil surroundings create an ideal place to concentrate on studies. Additionally, Tsukuba is home to many research institutions, providing me with opportunities to connect with talented people from different countries in my research field and make a deeper friendship that brings me a lot of joy. While Tsukuba may not be as bustling as some other cities,

the convenient transportation makes it easily accessible. The presence of Tsukuba Mountain allows for breathtaking views of the surrounding region, provides a place to relax and enjoy the beauty of nature. In addition, there are plenty of science museums and art galleries in the surrounding area, and many activities are held at Tsukuba Center on weekends, further enriching the local experience without the need to venture to the city.

② As a foreign student, one of the primary tasks that I consider crucial is learning Japanese. Knowing local language opens doors to learning opportunities, accessing research resources, and make it easier to integrate into the social environment. Fluency in Japanese enables smoother and more effective communication with local people, fellow students, and professors, making social interactions and daily life more convenient. Additionally, it offers a unique chance to immerse myself in the local culture and traditions, allowing for a richer and more meaningful experience during my time in Japan. Because the academic cultures and research methods have a big difference from what I have learnt in the past, I want to learn and develop a different approach to research and gain advanced knowledge and skills that will be useful in both academia and industry. Finally, build a network of international connections and become more adept at handling global issues and collaboration.

### **Chaeyeon Lee**

College of Medical Sciences, School of Medicine and Health Sciences
From Republic of Korea



2 What do you

**AMPUS** 

TI TII

STORIE

One of the things I enjoy about Tsukuba is its natural beauty. Ever since I arrived in Tsukuba, I've fallen in love with cycling and exploring the nearby parks. Tsukuba University and its surroundings have plenty of cozy spots where I can just sit back and relax. On gloomy days, I've found that playing my favorite songs on a playlist and munching on a

snack can instantly boost my mood.

And I do love to take a photo when I'd like to remember a moment, and I even have a social media account dedicated to sharing my pictures. Tsukuba provides the perfect backdrop for my photography adventures. The changing seasons here are so distinct, and this nostalgic vibe is uniquely Japanese. So whenever I'm feeling a bit bored or have some free time on my hands, you'll find me cruising around Tsukuba on my bicycle, capturing those picture-perfect moments.

②At University of Tsukuba, there is a system called "Short-Term Employment" where undergraduate students can work in research labs and gain experience related to research from an early stage. I currently take advantage of this system and work in a research lab. It's fascinating because I can acquire practical experience in research, which is different from theoretical knowledge through classes.

My major, Medical Science, provides a curriculum to acquire the necessary knowledge for becoming a clinical pathologist. And I am particularly interested in forensic science. So, I want to learn about the work in the field of forensic science as a clinical pathologist. As an international student studying at the University of Tsukuba, I have set one goal through my major courses. I want to find solutions to social issues in Korea by examining international cases. Currently, my goals are expressed in a vague, but as I continue to accumulate research experience, I hope to develop and achieve more specific goals.

### Chen Min

Doctoral program in History and Anthropology, Degree Programs in Humanities and Social Sciences, Graduate School of Business Sciences, Humanities and Social Sciencer From China

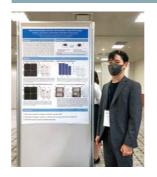


① University of Tsukuba abounds with wild Boletus and Amanita mushrooms. During the spring and summer, I enjoy riding my bicycle and searching for various types of mushrooms in the campus grasslands.

2 Because of my research, I have been conducting fieldwork and internships at funeral companies in China almost every year. I hope to continue to experience how to deal with death issues and bring more publicness to my investigation.

### Park Kiwon

Interdisciplinary Program in Life and Environmental Sciences, College of Biological Sciences, School of Life and Environmental Sciences
From Benyblic of Kores



1 really love the environment here! Some people might say it's countryside and boring. But I really love that Tsukuba is surrounded by nature and there are many beautiful parks and ponds in and around the campus. As a person who has lived in the middle of a big city all my life before coming to Tsukuba, I prefer a quiet and peaceful place like Tsukuba over Tokyo. Especially, Tsukuba provides me with a perfect place to focus on my study and research. Also, Tsukuba has a nice public transportation system to Tokyo,

so it's not hard to go to Tokyo or other cities on a day trip if necessary.

2 Tsukuba has students from many different countries and backgrounds. I want to make friends with these students and experience different cultures. Tsukuba also has a variety of well-developed physical education classes and clubs. Based on these opportunities, I want to continue to do workouts and certain sports such as Judo.

But one of the things that I want to accomplish the most is an academic accomplishment. Tsukuba has many outstanding internal research groups and many research institutes around the school. I want to be part of such a research group and publish a paper in a scientific journal during my study period. These experiences will bring me one step close to my dream of becoming a leading scientist.

### Yu, Cheng-Han

Master's Program in Biology, Degree Programs in Life and Earth Sciences, Graduate chool of Science and Technology



1 Tsukuba City is a beautiful city with broad green spaces and a slow lifestyle. I really enjoyed the atmosphere here. The faculty and administrators of the University did their best to help me in my daily life. Thanks to their kindness, I got used to living and studying in Japan shortly after my arrival. The University provided

many English-taught courses, allowing international students like me to enjoy the knowledge and activities during classes. I also attended some courses taught in Japanese. The professors clearly depicted state-of-the-art scientific progress and technologies, and I found one of the meanings of learning Japanese in the classes. There was another phenomenon that I appreciated a lot during my stay in Tsukuba. Japanese drivers' awareness of pedestrians quite amazed me. Road traffic safety made me feel easy when I was walking and cycling in Tsukuba.

2 I am a graduate student participating in a Double Degree Program between the University of Tsukuba (UT) and the National Taiwan University (NTU). My research is a collaboration project to establish a screening platform for neuroscience protein tools. I am the first student applying to the program, and it is the first collaboration between the two colleges. After finishing all the administrative procedures from admission to graduation, I want to provide my experiences to both universities and attract more students to bridge the communications and collaborations between UT and NTU. Interactions with the faculty and students here were my most important impetus to studying in Tsukuba. I wanted to get familiar with and make connections with Japanese academia. I also wanted to build connections between Japan and Taiwan laboratories. Japan and Taiwan have their respective talented students and resources. More cooperation and communication can inspire ideas and contributions to the progress of science.

### Jooeun Yoon

College of Comparative culture, School of Humanities and Culture From Korea



① At the University of Tsukuba, students active in various fields, not only nationality and gender, are gathered, so I enjoy interacting with them and expanding my thoughts. Until now, I had recognized the world with a little narrow perspective in my native Korea. However, I could experience a new world directly and indirectly, including various purposes, directions, and ideas, by interacting with people who grew up in a completely different environment!

Second, I enjoyed the natural environment of Tsukuba! I'm from Seoul, Korea, and I've only lived in the city, so

I've rarely experienced a place rich in nature like Tsukuba City. However, through visiting University of Tsukuba, I realized the joy of enjoying the natural environment. I enjoy the importance of nature through various activities, such as going on a picnic with my friends in spring or fall, enjoying various sports in summer and winter, and taking a walk while feeling nature.

② I want to experience lots of people by participating in extracurricular activities such as part-time jobs, club activities, and cultural exchange programs etc. In addition, I want to grow through these various social experiences, have a better relationship with an unspecified number of people who will enter society and meet in the future, and establish myself on how to live.

I think it will be given a variety of opportunities in various ways in the future, I think we shouldn't forget to challenge the new environment without being afraid. Also, I think that the premise of all these social activities is to study, which is the student's duty, and I think it is important not to neglect classes, graduation papers, and studies in academic terms. I hope that I will be able to acquire a lot of knowledge in the world as an academic aspect such as books and papers, and to develop further in the future by expanding my insights through various social experiences.

### Meng Liyuan

Intelligent Engineering Major, College of Engineering Systems, School of Science and Engineering From China



of I will have to say that there are just so many things to tell but the first thing that pop into my mind is to become able to participate in the Kyudo-bu's activities literally every single day. To be honest I knew absolutely nothing about Kyudo until my second year here and the Kyudo that I imagined before bears almost no resemblance to the real thing. Nevertheless, fellows from Kyudo-bu still took me in and raised me into an adequate shooter in Kyudo improving both my mental and physical condition. Kyudo leads me to observe myself in a way I never thought

about before, which undoubtedly benefits me a lot. More importantly, I've made progress in building reliable relationships with new people that I feel I can trust through Kyudo. Also the sport itself is always such a satisfying thing that rather thrills me. It feels like I found a world to escape from the engineering academic world when I got depressed and I love every single piece brick of this beautiful world.

② Basically I have always been interested in all areas of science and engineering that it bothered me quite a lot when I was about to choose my major when I applied for University of Tsukuba. Luckily during the past around 30 months of studying in the College of Engineering System, the subjects that truly interest me have finally come to me. For now, I am considering in further exploration in system control or signal processing and I thank all the people who have helped me, all the professors, staffs and my classmates, for all their guidance and support encouraging me to find the things I want to do. I would consider my college career a success if I managed to become a capable engineer in the areas mentioned above, then figure out what I can do to repay all the gratitude I don't deserve back. Of course making an athletic progress in Kyudo is also one thing I have always been longing deep down in my heart!

### Wu Bogian

College of Knowledge and Library Sciences, School of Informatics



① To me, comparing to big cities like Tokyo, Tsukuba City is a quiet place that I would be more likely to favor. Also, you cannot say Tsukuba City is inconvenient because it is far from big cities, as it also has a wide range of shops and restaurants. As for Tsukuba University, what I enjoy most must be the abundance in sports facilities and teachers for me to choose my favorite sports lesson and learn under professional instructions.

Tsukuba University has numerous associations for different hobbies and definitely anyone can find a place and get

to know people with similar interests. As a photography enthusiast who picked up a camera since elementary school, I cherish every minute in the Tsukuba Photoclub where I can share and hear about opinions about how to take better photos.

2 This is a serious topic to me, and I have been thinking about it since the first day I came here. The topic should be divided into two parts, the process and the results, and today I would like to talk about the process. As for the process, I must learn to take up the responsibilities as a student. As we move further into the world of academics, we may find what we are doing is becoming much more difficult that we imagined earlier, therefore we may lose interest and want to give up, but what I'm thinking about is that as a university student, I cherish my chances of being accepted into the university and I definitely do not want to disappoint the teachers who chose me. I have made mistakes before over this issue, and I shall never make same mistakes again. This is why I want to be a more responsible person and learn about the endurance for overcoming difficulties.

### Ren Yihan

Doctoral Program in Policy and Planning Sciences, Degree Programs in Systems and Information Engineering, Graduate School of Science and Technology



1 really love the atmosphere of Tsukuba Science City. It was December 2020 when I first arrived in Tsukuba, and I felt a different city from what I had imagined when I got off the highway. At first, I found Tsukuba a bit monotonous and boring, so I wasn't used to the city. But gradually I was attracted to this quiet place. Tsukuba does not have

too many noisy entertainment places, and surrounded by many universities and research institutes, Tsukuba has a very strong academic atmosphere. In particular, the University of Tsukuba, like a small forest, is quiet and beautiful, often enabling me to bring peace to my heart. That's why I had the idea of continuing my doctoral studies here. Now that the COVID-19 is basically over, more and more events are being held in Tsukuba, and I'm experiencing the vibrancy of the city. I hope that Tsukuba, which I love, will get better and better.

2 Thanks to the guidance of Prof. Yoshiaki Osawa and the cooperation of everyone in my laboratory, I have been able to obtain a master's degree, and I am still working toward a doctoral degree. During these three years, I have been able to grow in many other ways as well as in my research progress. One of the unique features of our laboratory is the high school-university collaboration project (Kodai Renkei). I have actively participated in this project, and this summer I served as the moderator for two high school-university collaboration presentations, one in Teshio City and the other in Itako City. Due to various reasons such as lack of experience, poor Japanese, I was not able to give a very good performance. However, it was a very valuable experience for me and something I must experience before becoming a real adult. What I want to accomplish most at the University of Tsukuba is also to grow into an adult who can be useful to society in this step-by-step manner.

### Yina Shin

aster's Program in Education, Degree Programs in Comprehensive Human Sciences, aduate School of Comprehensive Human Sciences Inm Korea



2 What do you

**AMPUS** 

П

STORIE

① Since University of Tsukuba is the predecessor of Tokyo University of Education, I think it is the best university to study my major, education science. In particular, the university library has a wide range of materials from the past to the present, and I think it is a very attractive place for research. One of the advantages of University of Tsukuba is that it has a lot of prestigious faculties, so I can receive detailed instructions.

In addition, University of Tsukuba is able to study not only humanities and natural sciences, but also a wide range of

fields such as physical education and art & design, so I can broaden my horizon. Also, I am interested in ballet, so I practiced ballet once a week at university through a subject called "Physical Education for Graduate School." I also could enjoy my life there, engaging with people who are doing research that is completely different from my own.

② What I want to accomplish through studying at University of Tsukuba is to get clues to discover the lifework that I will be working on in the future. Ever since I was a child, I have liked to spend time with children younger than me. So I have wanted to become a school teacher in the future and to study education sciences. While studying education sciences, I realized that both research and practice is important to support children's growth. Therefore, I would like to not only devote myself to research activities but also engage with many children while I am at university. For example, I would like to engage with children from diverse backgrounds through various opportunities such as university classes, volunteer activities, internships, laboratory seminars, and teaching practice. I believe those various experiences would help me to accomplish my goal as an educator.

#### **DU XIN** School of Physical Education, Health and Sport Science: From China



1 Before coming to Tsukuba city, the greatest attraction to me was the presence of the Japan Aerospace Exploration Agency (JAXA), which was filled with a sense of the future and cutting-edge technology. However, after starting my life in Tsukuba, I found myself enchanted by the natural environment, from the long running route stretching from the school to the Doho Park, always capable of healing my weary soul. The University of Tsukuba is a cool place where cutting-edge technology and traditional culture coexist. I deeply feel that perhaps only at this school on Earth, you

can imagine what kind of sparks might collide between Nobel laureates and martial arts. At the same time, the University of Tsukuba is also the alma mater of Tian Han, the lyricist of the Chinese national anthem, so I feel very familiar to this university.

2 During my time as a student of The University of Tsukuba, I will spare no effort to fulfill the two goals I once set for myself. The first is to diligently practice Kendo, honing a new version of myself. The second is to leverage University of Tsukuba's unique research capabilities to attempt to understand the scientific and social values inherent in Kendo techniques and competitions. At the same time, in keeping with the current trends of the times, I hope to make every effort to gain a clear understanding of everything related to artificial intelligence within University of Tsukuba , and envision the future development directions of the fields relevant to me.

### Ng Ray Shan

College of Psychology, School of Human Sciences
From Singapore



① Running along the rows of trees along Ichinoya at dusk is possibly one of the greatest feeling known to mankind. That, or cycling through seas of paddy fields flowing with the breeze. What's more, the school is unironically built in a forest, so the vibe is immaculate.

Now, you may or may not hear people say that there is nothing to do in Tsukuba. Do not listen to these people. They are lying. Tsukuba is full of wonders if you take the time to wander. Food is bussing, with portion sizes larger than your face. There's 宝篋山 (Houkyou-san), which

people often turn a blind eye to as these people are busy admiring the more well-endowed brother Tsukuba-san. There's also the Hoshino Coffee in Kenkyugakuen, which unlike other branches features a panoramic view of glowing green grass (before the harvest, that is). It's no Disneyland, but chilling around in Tsukuba with the people I love is where it's at.

2 Hitting the gym has been so important for me ever since leaving my home country Singapore. It's crazy because though I have days where I feel down, I have learned that doing the lat raises also raises my spirits. In that very same way, in Tsukuba University, I look forward to learning what works for me, to become the best (biggest) version of myself that others can rely on.

I've also tried to challenge myself with new activities including mountain climbing. Hiking is something that didn't hold much significance to me back in Singapore, where the land is flat and the view's not particularly breathtaking. But by joining the hiking club, making lifelong friends, challenging ourselves physically and mentally, I have found my horizons broadening with every trip to brave the mountains. At this point, I could use the cliche about life's ups and downs, but sometimes the hardest things in life run their course on flat ground. That's why I've decided that I want to try running the Tsukuba marathon during my time here. Just for the lols.

### Suharman

Doctoral Program in Engineering Sciences, Degree Programs in Pure and Applied Sciences, Graduate School of Science and Technology



• When I arrived for the first time in Tsukuba City, I was very surprised by the beauty of this city. The slogan of Tsukuba as the City of Science and Nature convinced me that Tsukuba City, especially the University of Tsukuba, is the right university for me to study and develop my knowledge. There are many museums and beautiful parks that I can visit with my family, and Mount Tsukuba is one of my favorite places to enjoy the beauty of this city. As an international university, I made many friends with Japanese and other international students, allowing me

to learn a lot about the cultures of many countries. Apart from that, I also enjoy the academic culture here, where I discuss many things related to my research field with my professor and lab friends. It provided a significant experience for me.

②As an international student, one of my primary tasks is to complete my studies well. Therefore, here, I have to learn a lot about how to do good research using the proper methods. However, the academic environment and research field are slightly different from my previous study in the master's program. I didn't find any significant obstacles. I have adapted well, thanks to the support and assistance of Professor Yohei Yamamoto and my friends here. Apart from that, I learned a lot about many things related to my studies. I also learned a lot about Japanese culture, especially discipline and hard work. I need to support my future career. Finally, building a network of international connections and collaboration in the research between Japan and Indonesia, especially between the University of Tsukuba and universities in Indonesia, is my hope for the future after completing my education.