Energy System – Information Technology Innovation
International Professional Program

Greetings

Looking back on a year full of fruitful events and our bright, energetic students, we are grateful for the positive spirit that characterizes ESITI program.

As our program enters its sixth year, we recognize the evolving global situation and the importance of supporting each other through these changing times. Accepting international students into our programs is a positive step towards building bridges and fostering a sense of global mutual understanding.

In the coming year, we will renew our commitment and continue to look for ways to make a positive contribution to the local community. We would like to ask for your continued warm support and understanding.

News & Events

ESITI POSTER SESSION 2023

ESITI's 2nd Poster Session was held on March 20th, 2023, at Research & Project Building on Saitama University Campus. 18 international students from Bangladesh, Pakistan, Myanmar, Vietnam, Malaysia and Senegal have presented their research fields. The research categories were Computer Sciences, Electrical & Electronic Systems, Mathematics, Material Science, Mechanical Engineering.

It was a great opportunity to present each other's research and we may even get inspiration from each other.

As in last year, many Japanese students, Professors as well as some Companies have visited the event.

ESITI will do our best to make this poster session as an annual event in future.

Professor Tetsuya SHIMAMURA,

Computer Science Department, has received the Best Paper Award at the 12th International Conference on Electrical and Computer Engineering (ICECE) held in Bangladesh from December 21 to 23. ICECE is a pioneering international conference in the field of electrical and computer engineering. In this conference, research institutions, government, and industry share and discuss the latest research results in this field. Prof. Shimamura is currently collaborating with Khulna University of Engineering and Technology (KUET) in Bangladesh, and the winning paper is one of the results of this research.

Shimamura Lab http://www.sie.ics.saitama-u.ac.jp/

MD FARUK HOSSAIN (Bangladesh)
Graduated from: University of Rajshahi
Laboratory: Assoc. Professor Shuhei Yagi
　　　　　　　Electrical & Electronic System Department since October 2021
【Research】*Device Simulation of Dilute Nitride Based Intermediate Band Solar Cell: Impact of Carrier Blocking Barrier Height on the Photovoltaic Performance*

The aim of this study is to enhance the photovoltaic parameters, in particular the conversion efficiency by achieving the high gain from confined large carrier density. Height of the carrier blocking barrier will be taken into account to investigate the effect. In order to do this currently I am using the licensed version of silvaco atlas semiconductor devices simulation software. Silvaco atlas is a leading device simulation tool which will help us to develop and optimize new semiconductor solar cell with high efficiency prior to manufacturing.

【Comment】Saitama University is a renowned public university of Japan and it has great reputation in the field of innovative research. At the same time, it provides highly qualified and fruitful education in its clean, green and peaceful campus. The windows of this university is very wide for the international students for all the countries and religions of the world. The faculty members and stuffs are extremely kind and helpful in all respects. I am really lucky to have an incomparable living environment of Japan and very proud to be a student of this university.

MD SARWAR HOSAIN (Bangladesh)
Graduated from: University of Rajshahi
Laboratory:　　　Professor Tetsuya Shimamura
　　　　　　　　　Computer Science Department since October 2021
【Research】*Emotion recognition from bone conducted speech*

This study aims to investigate the feasibility of using bone-conducted (BC) speech for emotion recognition. We will collect BC samples from about 30 participants while they speak in eight different emotional states: happy, sad, surprise, disgust, calm, fear, angry, and neutral. Then the samples will be processed and analyzed using deep learning techniques to classify the emotion conveyed in each sample. Simulation results will demonstrate the superiority of the proposed model's performance over the existing models in terms of recognition accuracy. The study argues that BC speech could be a promising method for emotion recognition, particularly in situations where traditional audio recording is not possible or desirable, such as in noisy environments or when privacy is a concern.

【Comment】 Saitama university has a number of research centers and institutes that are dedicated to advancing knowledge in a variety of fields. In addition to its academic programs, Saitama University also offers a range of support services and facilities for students, including on-campus housing, career counseling, and language support. This institution produced a large number of Bangladeshi graduates who are currently employed in a variety of academic and industrial fields in Bangladesh.
Japan, as a country, is known for its rich culture, advanced technology, and high standards of living. It is also home to some of the world's most prestigious universities and research institutions, making it a popular destination for international students and scholars.

MD MOHIBULLAH (Bangladesh)
Graduated from: Comilla University, Bangladesh
Laboratory: Interactive Systems Laboratory (Professor Yoshinori Kobayashi)
　　　　　　　Computer Science Department since October 2023
【Research】*Human Computer Interaction, Computer Vision and Deep Learning*

【Comment】 Japan is one of the top countries to pursue higher education. That's why I had a passionate to do my PhD from the Japanese universities. Later I found so many researchers with good quality in research in Bangladesh who pursued their PhD from Saitama University (SU). I talked to some of them and listened to the research quality of the SU. Then I applied to Professor Yoshinori Kobayashi to pursue my PhD and fortunately I got the chance. My professor is very kind and co-operative. I am very fortunate to have him as my supervisor. Also, I have found all the staff of SU are very friendly, helpful and student oriented. I hope I will be a pioneer researcher in the future after getting my PhD from SU. Finally, if anyone wants a friendly, helpful and safe environment besides good quality research environment, undoubtedly SU will be the best place for them.

SAJID AHMAD (Pakistan)
Graduated from: Sukkur IBA University, Pakistan
Laboratory: Professor Noriaki Yoshiura
                      Computer Science Department since October 2022

【Research】 *Privacy Protection in Surveillance Cameras*

In recent years, more and more surveillance cameras are being deployed throughout our surroundings, such as public parks, elevators, ATMs, airports, and highways and on many more places. These cameras are capturing huge amount of videos, at the same time, significant concerns about individual/human privacy have also been growing along with the vast application of surveillance cameras. Existing surveillance camera systems do not provide people with the right to control how facial information is collected and managed. There is violation of privacy rules in public surveillance cameras. Individuals' faces are shown publicly without concern. Our research focuses on Enabling the privacy protection in surveillance cameras using Deep learning Techniques. Protect Individual's Privacy. Blur the faces of individuals other than the required personal.

【Comment】 The main reason I choose to study at Saitama University is because it has excellent reputation in Engineering and computing, with a stimulating environment. Saitama University has become one of the best universities in Japan; it has top class professors and is in the middle of a historic city, and accessible to everything. It has a strong international relations program which is perfect for me. I just love everything about Saitama University. The huge library, the park, I just found the place incredibly inspirational and motivating, the study programs, and the emphasis professors put hands-on practice. I am thrilled to learn about Japanese culture and excited to study where the technology is of high and excellent standard.

MUHAMMAD WALEED AKRAM (Pakistan)
Graduated from: The Superior University, Lahore, Pakistan
Laboratory: Assoc. Professor Shuhei Yagi
                        Electrical & Electronic Systems Department since October 2023

【Research】 *Performance analysis and optimization of InSb based Thermo-Radiative Cell for Waste Heat Recovery*

【Comment】 It has been both a pleasure and an honor for me to be affiliated with Saitama University in Japan. My supervisor and departmental colleagues are extremely helpful and cooperative. The research laboratory is equipped with state-of-the-art instruments, which have consistently facilitated my research endeavors. Furthermore, I wish to express my appreciation for the attentiveness and care demonstrated by the staff and the I-house management team. Their commitment to addressing our concerns created an environment that felt akin to being in my home country. Japan, with its rich traditions and culture, has provided a unique backdrop for my academic pursuits. The inherent friendliness and disciplined nature of the people have left a lasting impression on me, leading me to regard the Japanese as among the most amiable individuals in the world. I anticipate that the valuable traditions and cultural aspects of Japan will continue to contribute positively to my daily life. I consider myself fortunate to be immersed in such an inspiring and friendly environment as I pursue my research activities at Saitama University. To all new students embarking on their journey at Saitama University and in Japan, I extend my heartfelt wishes for the best of luck. May this experience become the most enriching chapter of your lives.

BOBORAHIMOV AZAMAT BOBORAHIM UGLI (Uzbekistan)
Graduated from: National University of Uzbekistan
Laboratory: MANA-Green Materials and Advanced Catalysis Lab
                      （Professor Hideki Abe, NIMS, Tsukuba)
                      Electrical & Electronic System Department since October 2023

【Research】 *Green Hydrogen Production through Advanced Catalysis and Innovative Carbon Capture Techniques incorporating Catalysis*

【Comment】 Whether at university, public or private centers, or school, the Japanese education design is committed and disciplined at any level. All we have seen or heard about the top-notch quality is not just fiction! As one of the world's most high-tech countries, Japan has thrived in STEM (Science, technology, engineering, and mathematics). This makes it ideal for students in those fields. With plenty of programs to choose from, the academic choices are limitless.

I was fortunate to be awarded a scholarship by ESITI international program to study for my Ph.D. for three years at Saitama University, one of the most famous universities in Japan. My supervisor is really supportive and helpful.

If you are one of those people who prefer clean streets and cities with no trash dumped on the road, Japan is the perfect match for you. For a student, Japan is one of the finest places to get studies. Its diverse region and rich culture boast many architectural styles, tourist places, practices, traditions, and food. And the list is pretty much endless!

FILL & ESITI JOINT SYMPOSIUM 2023

ESITI program welcomed seven new doctoral students for admission in October 2023.

On November 14th, 2023, FILL & ESITI JOINT SYMPOSIUM was held as a Welcome Event for newly enrolled international students of ESITI Program. The Future Innovation from Light & Luminescence (FILL) at Strategic Research Center, Saitama University was established to promote research and fostering young human resources for the social implementation of new optical technology. It was an ideal event for ESITI students, and we had a very fruitful experience to have the opportunity to share the knowledge not only in optics, but also in diverse fields.

~~~ SPEAKERS ~~~

Professor Emeritus Kazuo KURODA, University of Tokyo

Dr. Kwangyun JUNG, Sevensix Inc.

Dr. Uma Maheswari RAJAGOPALAN, Shibaura Institute of Technology

Dr. Mousumi HAQUE, Former MEXT Scholar and Postdoc Researcher at Saitama University

MEXT Scholarship & Admission Information

ESITI Program is the English-mediated, three-year doctoral program at the Graduate School of Science & Engineering, Saitama University in the field of Computer Science, Electrical & Electronic Systems and Mechanical Engineering. Every year, MEXT Scholarship University Recommendation are awarded to 8 newly enrolled students.

MEXT Scholarship University Recommendation is the scholarship which is sponsored by Japanese government to support the international students who wish to pursue their study in Japan. An applicant must be recommended by a Japanese university to MEXT (Ministry of Education, Culture, Sports, Science and Technology). To be eligible, an applicant must meet the following requirements.

✓ be a national of country that has diplomatic relations with Japan.
✓ be under 35 years of age as of April 1st of the application year.
✓ be in both good physical and mental health.
✓ have excellent academic achievement with a minimum GPA of 2.30 (out of 3.0 on MEXT's standard scale) in one's master's degree
✓ have a language ability equivalent to B2 or above on the Common European Framework of Reference for Languages (CEFR)   (e.g., TOEFL iBT 80 or above, IELTS 5.5 or above, or other equivalent tests)

Admission Schedule for ESITI International Graduate Program

October 2025 intake
under MEXT Scholarship University Recommendation

Nov - Dec 2024	Application
Dec 2024- Jan 2025	Screening
Feb 2025	Announcement of the result
Jun – Jul 2025	Official approval by MEXT
Sept 27, 2025 (tentative)	Fall Semester begins

April 2025 intake
under Regular Admission (for Self-funded students)

Nov 2024	Application
Nov - Dec 2024	Screening
Jan 2025	Announcement of the result
April 10, 2025 (tentative)	Spring Semester begins

Please check our website for details.
http://park.Saitama-u.ac.jp/~rese/

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