



*The 5th Hosei University IIST International Colloquium
The first UIT-IIST joint seminar in Ho Chi Minh*

**Research Projects on Multimedia Information
Processing and Communication Engineering at
University of Information Technology and
IIST, Hosei University**

Aug 5-6th, 2017 at Vung Tau Beach, Viet Nam

This colloquium is to introduce current student research projects on multimedia information processing and communication engineering at UIT and IIST, Hosei University. This colloquium is co-sponsored by Hosei University IIST: Institute of Integrated Science and Technology, The University of Information Technology, and Hosei University Global Education Center

SESSION 1

Research Project on Image Processing at Hosei University

13:30 - 13:40 **Katsumasa Suwa**, Master student

Leaf detection for plant disease diagnosis

13:40 - 13:50 **Yuma Matsuoka**, Master student

Generation of target labels with deep similarity metric learning

13:50 - 14:00 **Yusuke Chayama**, Senior student

*Basic study of content-based image retrieval for brain CT images using
3D-CNN*

14:00 – 14:10 **Hiroki Tani, Kaito Odagiri**, Senior students

Self-introduction and future research plan

INTERMISSION (14:10-14:20)

SESSION 2
Research Projects at UIT-HCM PART 1

- 14:20 – 14:30, **Thanh Loi NGO**, *Senior Student*
A study on deep feature for twin's face recognition
- 14:30 - 14:40, **Thuy Loan LE THI**, *Graduate Student*
Research on SCION project, the next generation of Computer Networks
- 14:40 – 14:50, **Nhat Duy NGUYEN**, *Senior Student*
Object Recognition with Small Instances for Real-time Applications
- 14:50 - 15:00, **Van Thong NGUYEN & Van Thai NGUYEN**, *Seniors*
Elliptic Curves Cryptography applied for embedded and IoT devices
- 15:00 – 15:10, **Kim Chi PHAM DO**, *Senior Student*
Motion prediction from a static image

INTERMISSION (15:10 - 15:20)

SESSION 3
Research Projects at UIT-HCM PART 2

- 15:20 - 15:30, **Minh Man HO**, *Senior Student*
Face recognition in a video using Discriminant Incoherent Component Analysis
- 15:30 - 15:40, **Hanh Tien NGUYEN**, *Senior Student*
RFID Applications for patients tracking and management in hospital
- 15:40 - 15:50, **Duc Bao TANG**, *Junior student*
Video streaming for 360-degree car vision system
- 15:50 – 16:00, **Thuy Vy NGUYEN**, *Senior Student*
A Study on Face Recognition using Deep Learning

BIOSKETCH



productivity.

Hiroki Tani, currently a fourth-year undergraduate student in Hosei University, Tokyo, Japan. He is majoring in Computer Science. His current research is Deep Learning, especially Convolutional Neural Networks, and Image Processing. He is designing and improving a system that can diagnose plant viral diseases to help farmers improve their plant's



Kaito Odagiri, He graduated Soei high school in 2015, and he entered Department of Applied Informatics, Hosei University. Faculty of Science and Engineering. He is learning the basics of image processing for future research.



Katsumasa Suwa received his B.E. degree in Science and Engineering from Hosei University, Japan, in 2017. He is currently working toward M. E. Degree in Science and Engineering from Hosei University. (He is 1st-year master student in graduate school of Hosei University.) He is now investigating mainly on automated plant diagnosis based on machine learning techniques.



Yuma Matsuoka, currently a graduate student in Hosei University, majoring Computer Science. His research is related Deep Learning, especially Convolutional Neural Network. He is currently designing a system of generation of target labels with CNN based feature extraction and semi-supervised learning.



Yusuke Chayama, currently an undergraduate student in Hosei University, majoring Computer Science. His research is related to Deep Learning, especially Convolutional Neural Networks. He is currently designing a content based image retrieval system for medical brain images that will support Doctor's decision to diagnose various brain diseases.



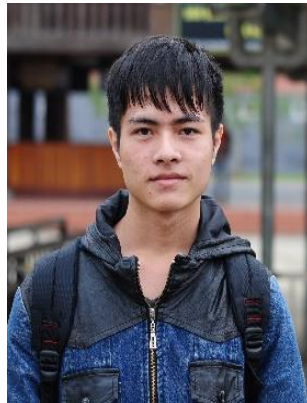
Thanh Loi, Ngo is currently a senior at University of Information Technology, Ho Chi Minh City, Faculty of Computer Science. His research field is Computer vision with the undergraduate thesis focus on Deep learning in facial recognition of identical twins. He had a short internship at Robert Bosch Vietnam for an object counting project since April 2017. After graduation, he plans to pursue a career in machine learning to develop applications for real-world problems.



Thuy Loan, Le Thi graduated from Computer Network and Communications department, University of Information Technology, Ho Chi Minh city. She was researching in Control Message Protocol (SCMP) which is designed to make the process of inspection activities and the network connection. With special design helps control SCMP packets and packet data exchange process becomes safer. She is now studying Japanese and working for a Network Security company.



Nhat Duy, Nguyen is a senior student at University of Information Technology – Vietnam National University Ho Chi Minh City, Viet Nam. His research topic is real-time small object detection. His paper with title: “Object Recognition with Small Instances for Real-time Applications” has been accepted for presentation at ICONIP 2017 (the 24th International Conference on Neural Image Processing)



Van Thong, Nguyen (left) & **Van Thai, Nguyen** (right) are the twins. They are in honors program students at the Information Security, University of Information Technology, Ho Chi Minh city. They're working on a research which called "Elliptic Curves

Cryptography (ECC) applied for embedded and IoT devices". The research purpose is to provide a secure communication for embedded and IoT devices with good at performance and energy.



Kim Chi, Pham Do is currently a senior student of Computer Science at University of Information Technology ([UIT](#)), Vietnam National University Ho Chi Minh City.

She is interested in Image Processing and now studying the problem of predicting optical flow in a static image for her undergraduate thesis. She is expecting to be an IIST student in Hosei University this September.



Minh Man, Ho is now an undergraduate at the University of Information Technology, Ho Chi Minh city. He will receive his Bachelor of Science in Computer Science (Honor Program) this year. He tends to create incredible Artificial Intelligence applications to help people work more efficiently. He has a knowledge of optimization, image processing, and datamining. He is doing his thesis which name is "Face Recognition in Video using Discriminant Incoherent

Component Analysis".



Hanh Tien, Nguyen is a Senior student at University of Information Technology, Ho Chi Minh city. She will finish her final semester at Faculty of Computer Network and Communications in next January. She is working on RFID applications for patients tracking and management in hospital. Her topic focuses on helping patients complete their health check in the crowded environment. Currently, Tien and her colleagues has completed the RFID programming and communications.



Duc Bao, Tang is the third-year student at University of Information Technology, Ho Chi Minh city. He studies Information Security. He is active, hardworking and patient. He is interested in interning in Japan. He is now working with Dr Tuan on using Raspberry Pi to stream video. He also loves AI technology and embedded programming.



Thuy Vy, Nguyen is currently a final-year student at University of Information Technology, Vietnam National University, Ho Chi Minh city, Viet Nam. She had evaluated some of the state-of-the-art deep models for the task face recognition as my undergraduate thesis. As a result, she found some properties not reported in their original works. The thesis is called "A Study on Face Recognition using Deep Learning".