### Short Summer Training for KMUTT students on Oct. 2010 in UEC

**Period**: 4 weeks (from 4th Oct to29th Oct)

**Location**: UEC, Department of Mech. Engg. & Int. Sys.

1-5-1, Chofugaoka, Chofu, Tokyo

UEC Supervisory staff: Asst. Prof. Kohji Higuchi (higuchi@ee.uec.ac.jp)

Technical expert Tatsuyoshi Kajikawa (kajikawa@ee.uec.ac.jp)

TA Yoshihiro Ohta (ohta@francis.ee.uec.ac.jp)

TA Tomohiro Uchikado (uchikado@francis.ee.uec.ac.jp)

KMUTT Leader: Assoc. Prof. Kosin Chamnongthai (kosin.cha@kmutt.ac.th)

Asst. Prof. Werapon Chiracharit (werapon.chi@kmutt.ac.th)

#### **Number of Training Students:**

Two Trainee students Navapadol Kittiamornkul and Sukritta Paripurana from Department of Electronic and Telecommunication Engineering are accepted to stay at UEC for training.

#### Program Agenda:

1st week: - Guidance for life style in UEC

- Introduction of Signal Processing

2nd week:- Training of Matlab software

- Make the filter using matlab
- Learn about PTI wavelet packet transform

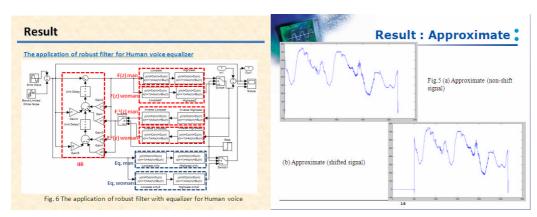
3rd week:- Hardware Implementation of Robust filter

- Simulation and experiment them proposed method

4th week: - Make the slide for presentation

- Last presentation of training results

In this program, students from KMUTT can enjoy to learn about digital signal processing and a lot of experience from collaborate with Japanese students.



The application of robust filter for Human voice equalizer

Perfect translation-invariant complex wavelet packet transform





At the entrance gate of UEC



Training with guidance from TA(Uchikado)



At Higuchi Lab





Introducing of the research at Nakano Lab





Last presentation at UEC



Sightseeing in Tokyo (Mr.Ohta, Ms. Sukritta Mr. Navapadol Prof. Werapon)

Report of the KMUTT students Ms.Sukritta Paripurana



# UEC - KMUTT Summer Training Program 2010 Report

In this program, I learned about perfect translation invariant wavelet packet transform which is a new technique to design a complex wavelet packet transform having translation invariance. It is very interesting research, and I think this knowledge can apply to my research. The UEC professors and student are very kind. I have many friend not only Japanese friend but also friend from many countries such as China, Iran, Columbia Thailand and etc.

I have visited other laboratories in UEC with my professors and UEC students. The students showed their research and answered our questions. It was good experience for me to learn in others research field.

The apartment was very convenient and very near the university. It had the necessary tool such as heater, washing machine, kitchen and etc.

Japanese people are very polite and very kind. Although some people cannot speak English, they try to do everything to help me.

In my opinion, this program is very useful. I learned many things from this program. It is not only the research but also Japanese culture. I have good experience from this program.

Ms.Sukritta Paripurana

Mr. Navapadol Kittiamornkul



## **UEC Summer Training Program 2010 Report**

In this program, I learned about the design of robust filter which is the de-noising method that does not make some noises and some DC components. After that, I learned how to apply the robust filter to human voice equalizer. It was very new knowledge and usefulness for me, and I may apply this knowledge to my research or my work in the future.

It not only the research project but also many Japanese cultures. I took the Japanese language course. I learned only two weeks, but I can read Hiragana, some Katakana, and How to use simple conversation now. That was very good experience for me.

The accommodation was very convenience and very near the university. It had all of the necessary tools in the room such as kitchen, heater, etc. It neared the department store and train station. I could buy food in low price.

Japanese people are very kind and very polite. I had many friends in this program. It is not only Japanese friends but it also from many countries. They taught me many things in many cultures.

In my opinion, this program is very useful, and it can make a lot of experiences. It is not about the only research, but it includes everything to spend the life in Japan.

Navapadol Kittiamornkul