November 9, 2017  
Eiji Kamioka  

Advanced Global PBL at UPM (Universiti Putra Malaysia)

A Workshop-based Advanced Global PBL program was held at Universiti Putra Malaysia (UPM) from October 31 to November 8, 2017. This program was organized by Faculty of Computer Science and Information Technology in UPM and Department of Communications Engineering in SIT. This program was aimed at activating collaborative research and student mobility between UPM and SIT. In total 53 people including students and staff joined this program. The program was divided into four activities, that is to say, gPBL, research workshop, research institute visit and invited lecture. The gPBL was an advanced one, focusing on Ubiquitous Computing and Information Network. The participants were divided into eight groups. Four research topics were prepared for discussion, which were (1) Big Data, (2) Image processing, (3) Security and (4) Robot programing. One topic out of the four was assigned to each group. Each group investigated the topic: finding issues, proposing the solutions, discussing the novelties and effectiveness. Finally, each group made a presentation about the idea and discussed it with the audience including the other group members and the faculty members. The research workshop was conducted in an oral presentation manner. The participants introduced their own current research themes, stating the achievement and the difficulties, leading to the collaborative research issues. As an investigation of today’s research and development trend, the participants visited MIMOS, Malaysian Research and Development Center. They gave a lecture on IoT, Big data, AI, Biomedical informatics and security, and the participants had an opportunity to observe the research laboratories. As one of the discussion topics of this gPBL, a lecture about “The challenge of security enforcement in IoT era” was given by a researcher from MCMC, Malaysian Communication and Multimedia Commission. One of the most important achievements of this gPBL was the research presentation in English by SIT undergraduate students. It was the first time they had given any presentation in English. This presentation was also aimed for the mid-term evaluation of Laboratory English activity. As a whole, this first advanced gPBL with UPM was successfully done. This year, one of the master course students of SIT has been studying in UPM for two months, and also SIT has accepted one regular master course female student who graduated from UPM under the MoU. These facts have realized this gPBL quickly and have activated another student exchange, that is to say, one Ph.D student from UPM will join SIT as an attachment student next year, meaning a co-supervising student will be achieved.
Summary of Advanced gPBL program in UPM

<table>
<thead>
<tr>
<th>Date</th>
<th>from October 31 to November 8</th>
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<tbody>
<tr>
<td>Location</td>
<td>Faculty of Computer Science and Information Technology in UPM (Universiti Putra Malaysia)</td>
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<tr>
<td>Accommodation</td>
<td>Palm Garden Hotel</td>
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<tr>
<td>Participants</td>
<td>[ Students ] 17 students (8 bachelors, 7 masters, 2 doctors) from SIT 20 students (7 bachelors, 2 masters, 11 doctors) from UPM [ Faculty members ] &lt; From SIT &gt; Prof. Eiji Kamioka Prof. Hiroyuki Ishizaki (MJIIT) &lt; From UPM &gt; Dean/Prof. Dr. Abu Bakar Md Sultan Deputy Dean/Senior Lecturer Dr. Azizol Hj. Abdullah Senior Lecturer Dr. Khaironi Yatim Sharif Secretary of Deputy Dean Ms. Erwina Khalid@Halid Senior Lecturer Dr. Abdullah Muhammed Senior Lecturer Dr. Mohd Taufik Abdullah@Selimun Senior Lecturer Dr. Novia Indriaty Admodiastro Senior Lecturer Dr. Salfarina Abdullah Senior Lecturer Dr. Mohd. Izuan Hafez Hj. Ninggal Senior Lecturer Mr. Mohd Noor Derahman Senior Lecture Ms. Raja Azlina Raja Mahmood Assistant Information Technology Officer Mr. Mohd Hanif Jaafar Senior Administrative Assistant Mr. Mohd Nasir Ahmad Administrative Assistant Ms. Nyonyah Lakim</td>
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<tr>
<td>Advanced gPBL</td>
<td>Given four topics, (1) Big Data, (2) Image processing, (3) Security and (4) Robot programming, finding the issues, proposing the solutions, discussing the novelties and effectiveness, then giving presentations</td>
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<td>Research workshop</td>
<td>All the students gave their research presentations in terms of information and communication technologies, and discussed the proposals with the audience in order to brush up their research.</td>
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<td>Research institute visit</td>
<td>MIMOS: Malaysian Research and Development Center</td>
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<tr>
<td>Invited lecture</td>
<td>“The challenge of security enforcement in IoT era” by a researcher from MCMC: Malaysian Communication and Multimedia Commission</td>
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<tr>
<td>Other activities</td>
<td>Campus tour, MJIIT visit, KLCC visit and Putra Mosque visit</td>
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(1) Transportations
Faculty of Computer Science and Information Technology in UPM supported all the transportation by bus.
1) From KL Airport to UPM, and vice versa.
2) From UPM to Palm Garden Hotel, and vice versa.
3) From UPM to IOI City Mall for lunch and vice versa.
4) From UPM to MIMOS, and MIMOS to Palm Garden Hotel.
5) From UPM to MJIIT, from MJIIT to KLCC, from KLCC to Palm Garden Hotel.
(2) Campus tour
After arriving at UPM, the campus tour was conducted. The school bus took us to a variety of facilities in UPM including UPM museum. There are some traditional Malaysian houses in the campus where participants can eat traditional Malay cuisine in a finger food manner.

(3) Opening ceremony and welcome party
The opening ceremony took place in the main lecture hall of Faculty of Computer Science and Information Technology. Subsequently, the welcome party was held with surprising cakes and traditional Malaysian foods that celebrated this gPBL.
(4) Ice breaking
After the opening ceremony, the ice breaking was conducted to get acquaintance with each other although they had already enjoyed talking.

(5) Meeting with Deputy Vice Chancellor
Prof. Eiji Kamioka was invited to the room of Deputy Vice Chancellor Prof. Dr. M. Iqbal Saripan, receiving greetings and exchanging gift each other. The talks with him were mainly student exchange, possibility of double degree and university – industry linkage.
Global PBL (gPBL) on Ubiquitous Computing and Information Network was conducted. PBL stands for Problem Based Learning where a problem is given and the participants propose the solution in a group discussion manner. In this PBL, however, the problem was not given. The participants had to find the problem itself by themselves. That is why this gPBL is called AgPBL (Advanced gPBL). The participants were divided into eight groups. Four research topics, which are Big Data, Image processing, Security and Robot programming, were prepared for discussion. One topic was assigned to each group. Each group investigated the topic: finding issues, proposing the solutions, discussing the novelties and effectiveness. Finally, each group made a presentation about the idea and discussed it with the audience including the other group members and the faculty members.
(7) Research institute visit
MIMOS (Malaysian Research and Development Center) visit was conducted, having a lecture on IoT, Big data, AI, Biomedical informatics and security, and the participants. There are a lot of researchers who got Ph.D in Japanese universities.

(8) Research workshop
The research workshop was also one of the main activities in this program. The participants introduced their own current research themes, stating the achievement and the remaining issues which may lead to the collaborative research.
(9) Introduction of SIT
An opportunity to talk about SIT was given. Prof. Eiji Kamioka explained general information of SIT, Ms. Manami Kanamaru (M2) presented SIT life and Mohamad Sabri bin Sinal (D2) talked about laboratory work. Surprisingly more than 100 final year of undergraduate students joined this session.

(10) Cultural exchange
Putra Mosque visit and MJIIT (Malaysia · Japan International Institute of Technology) visit were involved in the program as cultural exchange.
(11) Invited lecture
An invited lecture about “The challenge of security enforcement in IoT era” was given by a researcher from MCMC, Malaysian Communication and Multimedia Commission.

Invited lecture “The challenge of security enforcement in IoT era”

(12) Closing ceremony and farewell party
On the final day, the closing ceremony took place in the main lecture hall of Faculty of Computer Science and Information Technology. The certificate of completion for the gPBL was given to each participant. Also some special gifts were provided to SIT.

Certificate of completion
Special gift 1 from UPM
Special gift 2 from UPM
Group photo after the closing ceremony
Farewell party
Subsequently to the closing ceremony, the farewell party was held.

Females commemorating photo
Farewell party with Mee goreng