



ALPS2010 instructors, theme proposers and students

December 2010

Message from the Director and Dean

Large-scale complex systems have been in the news in 2010, both domestically and abroad. Korea beat Japan in a competition for a nuclear power plant order from UAE at the beginning of this year. Since then events that can be considered to be globally significant include the government's indecisiveness over joining the Trans-Pacific Partnership and the Free Trade Agreement, the Russian president's visit to Kunashiri island, the collision between a Japanese naval vessel and a Chinese trawler in the East China Sea, shell fire in the Korean peninsula, and WikiLeaks' publication of US government cables. Domestically, youth unemployment and an overall decline in social vitality are growing. The November 20 issue of Economist magazine contains a prediction that Japan will be overtaken by emerging countries by 2050. Such predictions only strengthen SDM's conviction that our basic approach, which is to design and manage systems from a global perspective over their entire life cycles, is essential to Japan's future. SDM will continue to focus on fostering future leaders that can think and act globally through enhanced collaboration with leading international universities. I appreciate your continuous support.



Yoshiaki Ohkami
Director, SDM Research Institute
Dean, Graduate School of
System Design and Management

News

TOPIC 1 Special lecture by Prof. Teshima featured in Fuji Sankei Business i



Prof. Ryuichi Teshima

Prof. Teshima delivered a lecture titled "Dialogue with Wise Men in the World of Intelligence – a Key to Understanding the 21st Century" as a part of "Chi no Saizensen (Frontline of Intelligence)", a special lecture series for business persons organized by Fuji Sankei Business i. The content of the lecture was featured in the October 21 edition of the paper.

▶ <http://www.sdm.keio.ac.jp/news/2010/11/08-110259.html>

TOPIC 2 Global COE Program on Nikkei and Nikkei Sangyo newspapers



An article on the MEXT Global COE Program "The Center for Education and Research of Symbiotic, Safe and Secure System Design" ran in both Nikkei Shimbun and Nikkei Sangyo Shimbun on November 8, 2010. Keio University Graduate School of System Design and Management and Graduate School of Science and Technology are mainly involved in the education and research activities of the program. Tomomi Nonaka in SDM Doctoral Program is featured in the article.

▶ <http://www.sdm.keio.ac.jp/en/news/2010/11/global-coe-program-on-nikkei-and-nikkei-sangyo-newspaper.html>

Visit the page below to read the article (in Japanese.)

▶ <http://www.sdm.keio.ac.jp/news/pdf/nikkeishinbun1108.pdf>

TOPIC 3

Special lecture by Prof. Mogi



Prof. Kenichiro Mogi

Prof. Kenichiro Mogi gave a special lecture on the brain, memory, and learning on November 5, 2010, as a part of the “Science and Philosophy of Systems 2” course taught by Prof. Takashi Maeno. Many cases, including savant syndrome and the relationship between memory and creativity, were introduced in this fascinating lecture.



Prof. Takashi Maeno and Prof. Kenichiro Mogi

TOPIC 4

SDM visits R&D center for business continuity plan



Visitors listening to Chief Researcher Shinohara's lecture

The Socio-Critical System Laboratory visited InterRisk Research Institute & Consulting, Inc. on November 10, 2010. InterRisk is one of the most advanced R&D centers in Japan in the “business

continuity plan (BCP)” area, which establishes systems for the government and companies to continue business during a disaster or terrorist event. Eight SDM students and faculty members, mainly from the laboratory, joined the visit.

Chief researcher Masamichi Shinohara, an internationally recognized authority on BCP, gave a two-hour lecture followed by a Q&A session. We learned that BCP has developed the concept of business continuity management system (BCMS) and is increasing its affinity for research topics conducted in SDM. They also said that Japanese public and private sectors don't fully recognize the

importance of BCMS although BCMS is gaining wider international recognition and is being included in international standards, such as ISO. Several of the attendees are conducting research on BCP at SDM and found the visit to be quite valuable to their work.



SDM members at InterRisk

TOPIC 5

Article by Prof. Toshiyuki Yasui featured in Nikkei newspaper



Prof. Toshiyuki Yasui

Prof. Toshiyuki Yasui's article on applying the systems approach to the relationship between the US and China was featured on November 19, 2010 in “Keizai Kyoshitsu (Economy Class)”, a section of Nikkei, a leading newspaper in Japan. Permission has been granted by the copyright owner for posting. The details of the article are as follows:

▶ <http://www.sdm.keio.ac.jp/en/news/2010/11/article-by-prof-toshiyuki-yasui-featured-in-nikkei-newspaper.html>

Name of the paper: Nikkei newspaper
Published on: November 19, 2010
Published by: Nihon Keizai Shimbunsha
Article featured in: “Keizai Kyoshitsu,” page 25 in the morning edition of Nikkei newspaper on November 19, 2010

Visit the page below to read the article (in Japanese.)

▶ http://www.sdm.keio.ac.jp/news/pdf/nikkei_yoko.pdf

TOPIC 6

Movie in the Dark @ Campus Theatre 2010

The Movie in the Dark @ Campus Theatre (MID_ACT) 2010 titled “There is happiness you can see when you close your eyes” attracted more than 100 moviegoers on November 13. “Shiawase Kazoku Keikaku”, a movie produced by Shochiku that features voice guidance, was also screened. Afterward, Tsutomu Abe, the director of the film, Prof. Takashi Uchiyama from the School of Cultural & Creative Studies of Aoyama Gakuin University, Toshiyuki Kajiwara, manager of Cinema Jack and

Betty (a theatre), and Keiko Saito, chairperson of City Light Film Festival planning committee participated in a panel discussion on voice guidance.

Voice guidance helps visually disabled people to enjoy movies by explaining what is occurring on the screen. Volunteers from Universal Design Laboratory headed by Prof. Hidekazu Nishimura organized the event's planning committee, and created voice guidance for the film for the first time under the instruction of director Abe. The audience enjoyed the narration by

SDM student Tomoaki Sakurai, who developed a fine narrative voice in his former work as a radio deejay. The planning committee also proposed the “one yen Movement” idea to produce voice guidance for 100 films a year by collecting one yen from the price of every movie ticket sold in Japan. Panelists supported the idea of promoting voice guidance through a movement called “Movie, Movement”.

▶ <http://www.sdm.keio.ac.jp/news/2010/10/22-090551.html>



People supporting MID_ACT2010



Director Tsutomu Abe (second from left) with planning committee members monitoring the voice guidance



(From right) Director Tsutomu Abe, Prof. Takashi Uchiyama, Mr. Toshiyuki Kajiwara and Ms. Keiko Saito in panel discussion

TOPIC 7

Research presentation at National Lifelong Learning Forum

SDM student Hiroaki Murase (D2) presented his research, (awarded “Best Paper” by the Japan Association of Regional Development and Vitalization), in the Regional Revitalization Forum of the National Lifelong Learning Forum held on November 20-22, 2010 in Kochi Prefecture. Regarding his research on regional revitalization with CSA (Community Supported Agriculture,) he introduced actual cases of regional revitalization through the promotion of agriculture and ways for local communities

to participate. Researchers, local residents, and students attended the forum to listen to research presentations despite the rainy weather. Mr. Roger Zbinden, Director of Asia for Switzerland Tourism, also made a presentation on destination management in the forum.

Prince and Princess Akishino made appearances at the general opening ceremony. Kochi governor Masanao Ozaki gave a speech followed by local traditional stage performances, including Yosakoi Odori.



Hiroaki Murase (D2) giving a presentation

TOPIC 8

Management and Financial Strategy course visits Nishijima Corporation



Visiting Nishijima Co., a company that does not have mandatory retirement system

As a part of the Management and Financial Strategy class, students toured Nishijima Corporation in Toyohashi, Aichi. The company, a manufacturer of machine tools, is unusual in

Japan; it has no retirement system. Employees who have the skills and will can work as long as they wish. It was the SDM's second tour to the company, following the last year's tour led by President Seike.

The company trains its employees to acquire many skills by transferring them to various sections throughout their career. After they learn about the overall company, they experience managerial posts early in their career, and are then promoted as specialists with advanced skills. One remarkable employee we met, who works actively and instructs younger employees, will reach his 60th year of continuous employment next year.

Students took the opportunity on the return bus trip to discuss how Nishijima Corporation could serve as a model for solving problems related to Japan's aging population.



In return, students created a video letter

TOPIC 9

Special lecture by Dr. R. Setchi from Cardiff University



Dr. Setchi (middle)

A special lecture by Dr. R. Setchi from Cardiff University, visiting professor from November 22 to December 4, was held on November 24. In her lecture titled “In Search of Design Inspiration: A Semantic-based Retrieval in Support of Concept Design” she introduced tools to support designers' inspiration, such as a system that enables users to choose images that are suited to their intention on the web. The lecture was followed by a lively discussion. Dr. Setchi and SDM faculty members

exchanged information regarding education and research and will continue to discuss future collaboration.

► <http://www.sdm.keio.ac.jp/en/student/2010/11/special-lecture-by-dr-r-setchi-from-cardiff-university-on-nov-24.html>

TOPIC 10

The 5th workshop of SDM 2010 Design Project ALPS

The 5th and final workshop for 2010 Design Project ALPS, a course sponsored by Norin-Chukin Bank, was held on November 19 and 20. Prof. Kurt Beiter from Stanford University introduced ME317, a course he teaches at Stanford University, and Prof. Olivier de Weck from MIT presented the statistical results regarding the paper planes that students flew in the previous workshop. After the lectures, 17 student groups gave their final presentations in English on ideas

for new services and products related to “safe and secured system design.”

The last afternoon event was “elevator pitches,” explanations (sales pitches) that are short enough to be delivered during an elevator ride. One team member from each of the 17 groups encountered a company president or potential investor in the elevator and has one minute to convey the essence of his or her idea before the elevator stops. Faculty members and industry proposers evaluate their performances.

The Ishii award, established last year to honor Prof. Kosuke Ishii from Stanford University for his great contribution to the first ALPS in 2008, was awarded to the “Cycle K Bicycle Simulator” team. SDM would like to thank all of the proposer organizations for offering the good themes that contributed to the success of ALPS 2010 and its several substantial achievements.



Final presentation



Exhibited panels



Elevator pitch



“Cycle K Bicycle Simulator” team, Ishii Award winner

TOPIC 11

The second Project Leader Training Course



Professors and participants in second Project Leader Training Course

The second Project Leader Training Course was held in November and December with industry-university collaboration. The four-day course was held over two days in

November and two days in December and the participants stayed overnight in the Collaboration Complex accommodations. The course featured lectures and activities that required active participation. In the November session, students received an assignment to practice their new skills at work or in their roles as students. They made presentations on their experience in the December session. Participants from various industries, including some located in Kansai, utilized this course as a networking opportunity. The four-day course was intensive; the workshop ran until 11 pm on the first day, and the lecture started at 7:30 am the next morning. The participants who completed the course were awarded a diploma by the Director of

SDM Research Institute. The participants enjoyed the project management senryu (satirical poem) contest for which they wrote brilliant poems that reflected their feelings about the course and their jobs.



Prof. Yoshiyuki Takahashi lectures

TOPIC 12

Prof. Yasui's interview featured in Keizaikai magazine



Prof. Toshiyuki Yasui

Prof. Toshiyuki Yasui's interview for his paper on sports intelligence was featured in the Nov. 2 issue, the Nov. 15 issue, and the Nov. 30 issue of Keizaikai magazine.

Posting of the article has been granted by the copyright owner. Details of the publication are as follows:

▶ <http://www.sdm.keio.ac.jp/en/news/2010/11/prof-yasui-interview-on-sports-intelligence-featured-in-keizaikai-magazine.html>

Name of magazine: Keizaikai
Issues: November 2, 16 and 30 November
Publisher: Keizaikai Co., Ltd.
Featured in: "Interpret Current Intelligence" page by Tadao Kano

Visit the page below to read the article (in Japanese.)

▶ <http://www.sdm.keio.ac.jp/news/pdf/keizaikai.pdf>

TOPIC 13

ASME Annual Meeting

The American Society of Mechanical Engineers (ASME, membership of 120,000) held its annual conference in Vancouver, Canada in mid-November. More than 3,000 people, including Prof. Yoshiaki Ohkami, attended ASME 2010 in the new convention center in the redeveloped area of the Vancouver waterfront. The center has four large halls with a capacity of 1000 and more than 50 small and medium-sized meeting rooms. It is

a 30-minute subway ride from the international airport and is surrounded by many hotels and shopping facilities. Not only large cities, but also medium-sized cities in western countries have such convention centers, but they are hard to find in Japan. This is due to the difference in cultural and historical background where it has been important for western people to meet to have discussions.

The presentation topics at the event showed that

mechanical engineering is expanding to include information technology, biotechnology, and nanotechnology. In a session on engineering education, many presentations emphasized the importance of active learning and hands-on practices. It validates SDM's educational philosophy and underscores the value of ALPS and our system engineering exercises.

TOPIC 14

Strategic Social Education System Laboratory enters Shakaijin Kisoryoku Grand Prix



Presenters, (from left) Jun Kawai, Yurie Makino, Kiyoto Kiso and Prof. Taketoshi Hibiya

The Strategic Social Education System Laboratory of the SDM Research Institute presented the results of its "self-sustained action" training program in the Shakaijin Kisoryoku (basic business skills) Grand Prix hosted by the Ministry of Economy, Trade and Industry on November 29. After Prof. Hibiya introduced

SDM, Jun Kawai (D2), Yurie Makino (M2) and Kiyoto Kiso (M1), all students in the master's program, gave presentations and participated in active discussions with the judges.

A "self-sustained action" training program helps students to acquire the ability to think, set targets, plan and act. More specifically, it teaches recent university graduates how to begin fruitful research and subsequently conduct a successful job hunt. SDM students are taught to design and manage themselves with system engineering methods acquired in lectures and through ALPS. Mentors (mainly working students) asking them questions, help them to find solutions to their problems, and provide moral support as the students refine their goals and work toward them.

Though the SDM team didn't advance to the final, SDM is proud of this achievement; a new laboratory was established based on the SDM students' proposal. They presented their initial results at the Grand Prix and we look forward to hearing more. At the Grand Prix, an engineering university introduced its engineering design project based on technical analysis to solve specific demands made by companies. The existence of such a project and the fact that various companies have chosen to collaborate with SDM on ALPS from this year show that there is a societal need for ALPS-style education. An SDM education, in which students acquire the skills to view problems from a macro perspective and to find inspired solutions for those problems, is only growing in importance.

Note Lab profiles do not appear in this issue.



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