ISASE2017

The 3rd International Symposium on Affective Science and Engineering

March 20 (Mon.) - 21 (Tue.), 2017

Kogakuin University, Tokyo, Japan

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Welcome to ISASE2017

Hisao Shiizuka, Chair of ISASE

Affective engineering (or Kansei engineering) is a field of study that aims to contribute to society through the discovery and utilization of Kansei (affective) value. Kansei refers to the impression made by stimulus from the outside world. It is subjective and difficult to explain in a logical manner. Affective engineering is a science that strives to find methods for achieving Kansei value by focusing on the sense of suitability with human feeling that is difficult to explain solely in logical terms. Human intelligence is composed of two aspects: the emotional and sensory aspect, and the objective, precise, and quantitative thinking aspect. Long ago, these two aspects began to develop and specialize independently of one another, with the former typically expressing itself in the arts, fashion, and other fields based on Kansei, and the latter in science and engineering.

The combined field of affective science and affective engineering may be seen as emerging from the two separate developments, with the aim of uniting them. To maximize the utility of affective engineering research, we must look beyond mere quantitative research. What is important is the extent to which qualitative research, which takes into consideration aspects of quality that cannot be grasped in merely quantitative terms, is incorporated into the overall research. When human beings receive stimulus (information) from the outside world and process it in the brain, two mental processes are thought to take place; one overt and one covert. The former process corresponds to cognitive information processing and the latter to affective information processing. It is thought that the interaction of these two processing methods leads to the making of final decisions in human beings. If we consider the analogy of an iceberg floating in the ocean, cognitive information processing corresponds to the tip and affective information processing to the rest of the iceberg, which is hidden under the ocean surface (though, in this case, it will be the focus of countless future research topics). In this respect, there is great value in and need for affective engineering, and it will become a far more prominent field in coming years.

In light of the foregoing, the International Society of Affective Science and Engineering (ISASE) had been established in three years ago as an international organization devoted to introducing the new academic field of affective science and engineering to the world. Our hope is that ISASE will become a hub for researchers worldwide and for the promotion of affective research.

The ISASE is intended to contribute to society by focusing on a number of areas related to human sensibilities that exist in between science and engineering.

Next year's ISASE2018

Next year's ISASE 2018 will be held at Eastern Washington University (EWU), on June, 2018. I am hoping that many people visit EWU and join ISASE 2018. EWU Spokane is home to Eastern's newest college, the College of Health Science and Public Health, as well as the College of Business and Public Administration.

I hope that this conference will be a forum for valuable information exchange for everyone.

Keynote 1

13:05-13:30, Monday, 20th March
Room A0712 (Floor 7)

"First, what is the meaning of design?
What is the job of a designer?
What kind of person makes a great designer?"

Santillo Francesco
(Neptune Design Co.,Ltd)

Abstract: What is design? What does a designer do? What kind of person is an excellent designer? If the definition of the design is blurred, it is not clear what the designer does. During the 1990's, when I working for the Italian automobile design and manufacturing company called called Carrozzeria, there was a worldwide automobile boom. We undertook design project requests from automobile manufacturers from around the world. At that time, many automobile companies relied on the experience and skills of well known Carrozzerias. Today, almost all automobile manufacturers have dedicated design staff with the ability to fully design their products within the company. In today's world, the role of designers vary greatly depending on the type of field the designer is working in. There are industrial designers, fashion designers, graphic designers, user-interface designers, architect designers, and many more. I will explain these differences based on experience.

Profile: My name is Santillo Francesco and I launched Neptune Design Co., Ltd. in 2007 in Yokohama, Japan. In 1989, I graduated from IAAD (Institute of Applied Art and Design in Turin) of Italy. I started my career working in a product design company. After that I worked in various types of transportation design companies; a Carrozzaia (Italdesign), a motorcycle maker (Piaggio), and several OEM car manufacturers. In 199_ I work for Daimler-Benz. In 1999, I came to Japan to join the Toyota Motor Corporation. Following Toyota, I worked for Honda R&D. In 2008, I founded Neptune Design an independent design company, which gives me the opportunity to be involved in the design development of a wide range of products including transportation design, dental medical equipment, tableware, etc.

Keynote 2

13:30-13:55, Monday, 20th March
Room A0712 (Floor 7)

"The State of the Art in Affective Engineering Research of KRISS "

Se Jin Park
(KRISS)

Abstract: As the national metrology institute (NMI) of Korea, we (KRISS) establishes, maintains, and improves National Measurement Standards. What is Sensory Evaluation? It is a scientific discipline used to evoke, measure, analyze and interpret those responses to products that are perceived by five senses. In general affective measurement, the human emotions are evaluated regarding stimulus (example: pleasant/unpleasant, happy/sad, relax/nervous, etc.). However, it is not a quantitative measurement. Therefore, we (KRISS) research to measure human emotion quantitatively and establish as a standard. This presentation will discuss some of the key issues to be considered for aforementioned. Also, will discuss some of the case studies of emotional research (example: visual, auditory, odors, tactile, sleep, aging, etc.).

Profile: Se Jin Park received his Ph.D., in Industrial Engineering from Korea University, in 1994. Since joining Korea Research Institute of Standards and Science (KRISS) in 1988, he served in various positions including Director of Convergence Technology, Head of Ergonomics related research, Head of Medical Metrology. Also, he served as vice president of Korean Society of Emotion and Sensibility, and Ergonomics Society of Korea. Currently, he is the Director of Data Center for Korean Body Measurement at KRISS supported by Ministry of Knowledge Economy. Also, he is the President of Korean Society for Emotion and Sensibility. His research interest includes human factors and ergonomics, biomechanics, emotion and sensibility, seating comfort, human vibration, human-computer interaction (HCI), internet of everything (IoE), and anthropometry.

Program Monday, 20th March

13:00 – 13:05 Opening ------ (Room A0712)

13:05 – 13:30 Keynote-1 ------ (Room A0712)

First, what is the meaning of design?

What is the job of a designer?

What kind of person makes a great designer?

Santillo Francesco (Neptune Design Co.,Ltd)

13:30 – 13:55 Keynote-2 ------ (Room A0712)

The State of the Art in Affective Engineering Research of KRISS

Se Jin Park (KRISS)

14:00 – 16:00 Oral Presentation Sessions

A1: Interaction Design ------ (Room A0712) 14:00 – 16:00, 20th March

A1-1: How to Model Value-Creating Communication: Consensus Building Process as an Example

Yuri Hamada, Hiroko Shoji (Chuo University)

A1-2: Cancer Rehabilitation QOL Assessment Management Application Prototype and Evaluation

Yukiya Funada, Shuji Kurita, Jue Zhang, Emiko Yamazaki (Kogakuin University)
Takuro Sakurai (National Cancer Research Center Central Hospital)

A1-3: Children and Pets Safety System in Car

Albunasser Tahel, Abdalla Alblooshi, Shino Iwashita
(Tokyo University of Technology)

A1-4: Measuring Affective Response of Confectionaries using Pair Comparison Method in Rasch Model

Farzilnizam Ahmad, Raymond Holt, Brian Henson (University of Leeds)

A1-5: A Behavioral Economics Analysis of a Stress Checking System under the revision of the Occupational Industrial Safety and Health Act: The Evaluation of VDT Work Fatigue by Electrocardiogram RRI Analysis

Hiromi Fujimori (Aoyama Gakuin University)
Misaki Shiba, Hisaya Tanaka (Kogakuin University)

A1-6: Study on Sleep Efficiency Monitoring: Using Sleep Induction System

Damee Kim, Seunghee Hong, Murali Subramaniyam (Korea Research Institute of Standards and Science, Electronics and Telecommunications Research Institute)
Younghyun Lim (GEOMC Co. Ltd.), Sejik Park (Konkuk University)
Sejin Park (Korea Research Institute of Standards and Science, Electronics and Telecommunications Research Institute)

B1: Soft Computing------ (Room A0715) 14:00 – 16:00, 20th March

B1-1: A Moral Judgment System using Attention-based Distributed Representation and Co-occurrence Information

Masahiro Yamamoto, Masafumi Hagiwara (Keio University)

B1-2: Behavior Expression Model based on Structural Model of the Human Psyche for Robots with Growth Function

Xiang Yu (Kansai University)
Hiroshi Takenouchi (Fukuoka Institute of Technology)
Masataka Tokumaru (Kansai University)

B1-3: Sympathy Expression Model of Robots Considering Turn-Taking in Multiple Communication

Yuki Tsukada (Kansai University)
Hiroshi Takenouchi (Fukuoka Institute of Technology)
Masataka Tokumaru (Kansai University)

B1-4: Cuteness on Motion of Stuffed Animal Robot: Effects of the Way of Motion and the Velocity

Masato Sakurai, Motoki Kitagawa (NAYUTA Limited Liability Company)

B1-5: Another Attempt of Estimating a Shooting Angle in Ear Recognition

Daishi Watabe, Takanari Minamidani, Hideyasu Sai
(Saitama Institute of Technology)

B1-6: Discrete Wavelet Analysis of Psychological Projective Drawings by Patients with Schizophrenia

Kazuhisa Takemura, Keita Kawasugi (Waseda University)
Yumi Iwamitsu, Hitomi Sugawara (Kitasato University)
Sakura Nishizawa, Yasuyuki Tsukamoto, Asako Nobutou, Akiko Kodaira,
Junichi Todoroki, Keiko Todoroki (Tsuruga Hospital)

16:10 – 17:50 Oral Presentation Sessions

A2: Affective Science & Engineering ------ (Room A0712) 16:10 – 17:50, 20th March

A2-1: Designing Engineering Design Workshop for Student with Different Areas of Education

Patchanee Patitad, Hidetsugu Suto (Muroran Institute of Technology)

A2-2: Physiological and Psychological Effects of OLED lighting Locations on Office Work Efficiency

Erina Kakehashi (Chiba University)
Jeongseo Choi (Chiba University, BB Stone Design Psychology Unit, Inc.)
Susumu Takekawa (KONICAMINOLTA,INC.)
Akira Suzuki (Chemical Materials Evaluation and Research Base)
Masayuki Kimura (Chemical Materials Evaluation and Research Base)
Haruo Hibino (Chiba University, BB Stone Design Psychology Unit, Inc.)

A2-3: Assessing Symptoms of Excessive SNS Usage Based on User Behavior and Emotion: Analysis of Data Obtained by Questionnaire

Ploypailin Intapong (Shibaura Institute of Technology)
Saromporn Charoenpit (Thai-Nichi Institute of Technology)
Tiranee Achalakul (King Mongkut's University of Technology)
Michiko Ohkura (Shibaura Institute of Technology)

A2-4: How Different Patterns Affect People's Feelings of Goodness

Emika Okumura, Fumihiro Shutoh, Toshimasa Yamanaka
(University of Tsukuba)

A2-5: How Does Congruence of Scent and Music Affect People's Emotions

Chen Zhou, Toshimasa Yamanaka (University of Tsukuba)

B2: Affective Science & Engineering ------ (Room A0715) 16:10 – 17:50, 20th March

B2-1: Study of a Non-linear Tone Control Method for Evaluation of Minute Sounds

Yutaka Suzuki (University of Yamanashi)
Osamu Sakata (Tokyo University of Science)
Asobu Hattori (Tokyo Metropolitan Industrial Technology Research Institute)
Masayuki Morisawa (University of Yamanashi)

B2-2: Effects of Seasons on Impression Factors of Pictures

Manami Tamai, Teruhisa Hochin Hiroki Nomiya (Kyoto Institute of Technology)

B2-3: Texture Analysis of Rice Noodle based on Ultrasound Elastography

Osamu Sakata (Tokyo University of Science)
Takaaki Satake (University of Tsukuba)
Yutaka Suzuki (University of Yamanashi)

B2-4: Effect of Classical Background Music Tempo on a Mental Stress Task: Physiological Evaluations

Masashi Murakami (Chuo University)
Takashi Sakamoto (National Institute of Advanced Industrial Science and Technology)
Toshikazu Kato (Chuo University)

B2-5: Activity and Emotion Recognition for Elderly Health Monitoring

Brahim Benaissa, Mario Köppen, Kaori Yoshida
(Kyushu Institute of Technology)

18:30 – 20:30 Banquet

Program Tuesday, 21st March

9:00 – 10:40 Oral Presentation Sessions

A3: Psychology of Cognition ------ (Room A0712) 9:00 – 10:40, 21st March

A3-1: Onomatopoeic Classification of Pure Tones

Takahiro Suzuki, Miho Kitamura (Waseda University)
Sho Otsuka (NTT Communication Science laboratories)
Katsumi Watanabe (Waseda University, The University of Tokyo)

A3-2: Features of Writers' Strokes Are Expressed by Wider Spatial Frequency Band than Features of Font Styles In Handwritten Characters: A Basic Study for Design with Handwritten Characters' Pictorial Features

Shioko Mukai, Haruo Hibino, Shinichi Koyama (Chiba University)

A3-3: Face Inversion Effect on Disgust Evoked by a Cluster of Dots

Manami Furuno, Yuri Sakurai (Chiba University)
Shu Imaizumi (The University of Tokyo)
Haruo Hibino, Shinichi Koyama (Chiba University)

A3-4: Effects of Skin Texture in Reading Facial Expression

Taku Nakamura, Junya Ueda, Katsunori Okajima (Yokohama National University)

A3-5: A Note on Computing Affective Information

Atsushi Inoue (Eastern Washington University)

B3: Fashion Design & Business ------ (Room A0715) 9:00 – 11:00, 21st March

B3-1: A Survey of Consiousness and Habits of University Students for Taking Meals with Rich KANSEI

Ayako Nemoto (Hokkaido University of Education)

B3-2: Relationship between Working Experience of Patternmaker with a Designer and the efficiency of Clothing Design

KyoungOk Kim, Masayuki Takatera, Tsuyoshi Otani (Shinshu University)

B3-3: Development of a Textile Proposal System (TPS): Examination of luster evaluation and overall comparison with British designers

Ken Yashima, Julie Peiffer, KyoungOk Kim, Masayuki Takatera (Shinshu University)

B3-4: Understanding the Effects of Multi-Sensory Stimulus on Children`s Collaboration Feelings During Play Activity: Literature Review for Aiding on the Development of Interactive Play Tools

Rodrigo Fernandes, Toshimasa Yamanaka (University of Tsukuba)

B3-5: Relationship between Body Sizes and Jacket Measurements on the Appearance of a Tailored Jacket

Ai Monobe, KyoungOk Kim, Masayuki Takatera (Shinshu University)

B3-6: A Preliminary Note on Discrete Mathematics as Affective on Digital Games: Towards to Virtual Reality Experiential Kansei e-Learning of Abstract Algebra

Tetsuya Murai (Chitose Institute of Science and Technology)
Yasuo Kudo (Muroran Institute of Technolog)
Yotaro Nakayama (Nihon Unisys, Ltd)
Seiki Akama

10:50 – 12:30 Oral Presentation Sessions

A4: Affective Design ------ (Room A0712) 10:50 – 12:30, 21st March

A4-1: Emotion-based Font Selection: The Mixture of Japanese and Latin Typefaces

Qianru Qiu, Shu Watanabe, Kengo Omura (Fuji Xerox Co. Ltd)

A4-2: Methods of Expression and Ease of Understanding in Maps in Large Spaces: Map Design Elements Easy for the Weak-sighted Persons to Use

Chitose Ikeda (Toyo University)

A4-3: Comparison of Spoon Designs based on Kawaiiness between Genders and Nationalities

Tipporn Laohakangvalvit, Michiko Ohkura (Shibaura Institute of Technology)

A4-4: The Effect of Modifying the Skeleton and Band to Improve Baseball Glove Function

Hibiki Kuroda, Keizo Takahashi (Biwako Seikei Sport College)

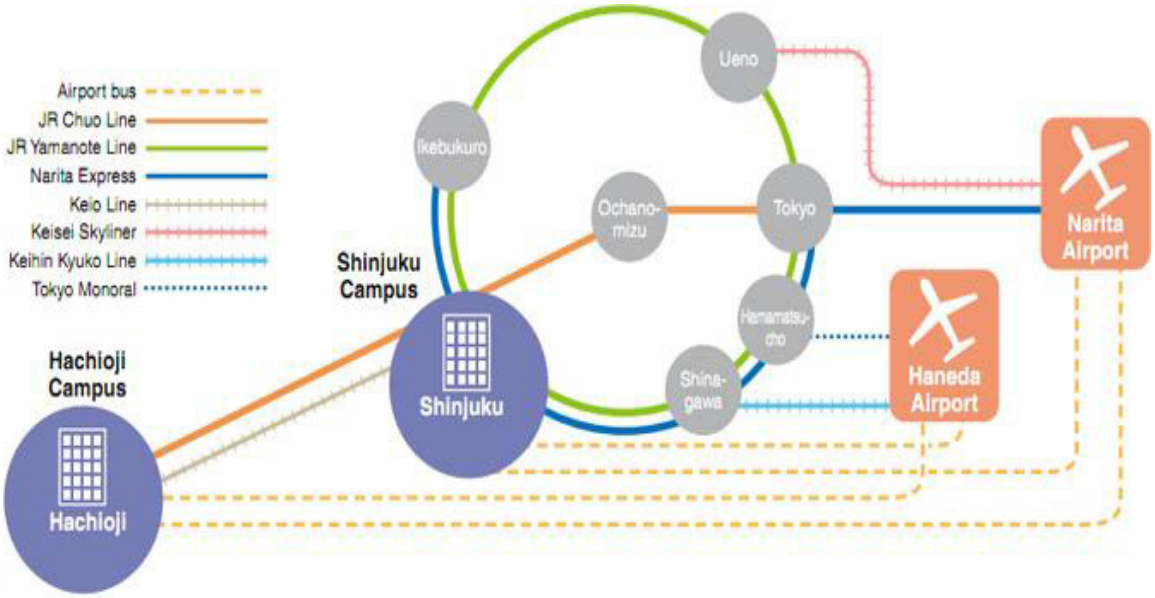
A4-5: Fundamental Consideration of the Use of Inference Patterns in Product Design – A Case Study on the Combination of Abduction and Induction –

Naoshige Akita, Yoshitsugu Morita (Kyushu University)
Hisao Shiizuka (SKEL/Fuzzy Logic Systems Institute)

Access Map

Kogakuin University, Shinjuku Campus
1-24-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-8677
Tel: 03-3342-1211 (main switchboard)

Transportation from Narita & Haneda Airport



Narita Airport	Narita Express (approx. 80 min.)			Shinjuku
Narita Airport	Keisei Skyliner (approx. 60 min.)	Ueno	JR Yamanote Line (approx. 24 min.)	Shinjuku
Narita Airport	Airport bus (approx. 85 min.)			Shinjuku
Narita Airport	Airport bus (approx. 160 min.)			Hachioji
Shinjuku	JR Chuo Line (approx. 35 min.)			Hachioji
Shinjuku	Keio Line (approx. 34 min.)			Hachioji
Haneda Airport	Airport bus (approx. 35 min.)			Shinjuku
Haneda Airport	Airport bus (approx. 75 min.)			Hachioji
Haneda Airport	Keihin Kyuko Line (approx. 13 min.)	Shinagawa	JR Yamanote Line (approx. 18 min.)	Shinjuku
Haneda Airport	Tokyo Monoral (approx. 13 min.)	Hamamatsucho	JR Yamanote Line (approx. 21 min.)	Shinjuku

Access Map

Kogakuin University, Shinjuku Campus

1-24-2 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-8677
Tel: 03-3342-1211 (main switchboard)

- A five-minute walk from JR Shinjuku Station, west exit
- A five-minute walk from Shinjuku Station on the Keio, Odakyu, Toei, or Tokyo Metro lines
- A three-minute walk from Tochomae Station on the Toei Oedo Line
- A 10-minute walk from Seibu Shinjuku Station on the Seibu Shinjuku Line

Floor 7, Venue Map

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