Antro-Fisiologi, Psikologi Perseptual, dan Matematika Terapan dan Ilmu Komputer

Physiological Anthropology, Perceptual Psychology, and Applied Mathematics and Computer Science

09:45 - 10:00   Opening Remarks
Dean of Faculty of Industrial Technology - ITB
(Prof. Dr. Deddy Kurniadi)

10:00 - 10:10   Introduction: Seminar objectives and introductions
Seminar objectives and introductions
(Prof. Hideyuki Takagi)

10:10 - 10:30   **"My experience of studying in Japan"**
(Dr. Titis Wijayanto)

10:30 - 12:00   **Environmental Ergonomics: Human Thermal Environment in Indonesia**
(Ergonomi Lingkungan: Manusia dan lingkungan termal di Indonesia)*
(Dr. Titis Wijayanto)

12:00 - 13:00   (lunch and pray)

13:00 - 14:30   **An Introduction to Brain Research**
(Pengantar Penelitian Otak)
(Prof. Gerard B. Remijn)

14:30 - 14:45   (break and pray)

14:45 - 16:15   **Interactive Evolutionary Computation**
(Intraktif Komputasi Evolusioner)
(Prof. Hideyuki Takagi)

16:15 - 16:30   Q&A for whole lectures and studying in Japan for those who have questions

(*)These talks will be given in Bahasa Indonesia.

Lecture 1: **Environmental ergonomics: Human-thermal environments**

Human responses to thermal environment and to internal heat production, physiological and behavioral responses, serve to maintain internal body temperature around 36-38C. In this lecture, human adaptation to thermal environment will be discussed, particularly on how people from tropical area adapted to hot environment considering their heat balance and behavioral responses.

Lecture 2: **An Introduction to Brain Research**

In this lecture we will look at the structural and functional organization of the human brain, and discuss the workings of the brain in relation to human perception. The examples of neuroscientific research will mostly relate to human hearing and vision.

Lecture 3: **Interactive Evolutionary Computation**

Following basic introduction of fuzzy systems, neural networks, and evolutionary computation (EC), we learn one of EC applications, interactive EC (IEC) which optimizes a target system based on human subjective evaluations. Through many IEC applications in wide variety of application areas, we learn its wide applicability and consider how to apply IEC to our research. Related slides and a tutorial paper are downloadable from the "downloadable files" menu at http://www.design.kyushu-u.ac.jp/~takagi/

Titis Wijayanto is an academic staff from Dept. of Mechanical and Industrial Engineering, UGM. He obtained his PhD from Human Science International course, Graduate School of Design, Kyushu University in March 2013. His research interests are physical ergonomics and environmental ergonomics. He is currently working on human-thermal environments as a Research Fellow in Kyushu University.

Gerard B. Remijn (the Netherlands) is an Associate professor of the Faculty of Design, Kyushu University. He is mainly interested in perceptual processes in the human brain, with research on a wide variety of topics related to auditory perception, visual perception, and time perception.

Hideyuki Takagi is a professor of Faculty of Design, Kyushu University and has worked on computational intelligence for a quarter century. He is especially interested in combining human factors and computational intelligence, so called Humanized Computational Intelligence. His lab is the center of interactive evolutionary computation research in the world.