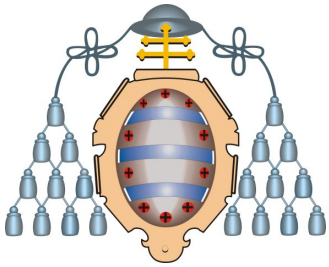

University of Oviedo

USABILITY ENGINEERING 2009

Organized by the

Department of Computer Science

In collaboration with Escuela Politécnica Superior de Ingeniería de Gijón (EPSIG), Escuela Universitaria de Ingeniería Técnica en Informática de Oviedo (EUITIO) y Escuela Universitaria de Ingeniería Técnica en Informática de Gijón (EUITIG).

About our Keynote Lecturers

Dr. Yoshihiro Kawahara. Assistant Professor at the university of Tokyo, from where he received his B.E., M. E., and Dr. degrees in 2000, 2002, 2005, respectively. His Ph.D's thesis work is "Research on Context-adaptive Network Service and Its Organisation" (adviser, Prof. Tomonori Aoyama). In 2005 he joined the faculty of the University of Tokyo. He is a member of the IEEE, IEICE, and IPSJ. His research interest include activity recognition technologies enabled by networked sensors.

MSc Hiroshi Tamura. Research Director, Innovation Lab., Hakuhodo Inc. Director, i.School, the University of Tokyo. MSc in Interdisciplinary Information Studies (Univ. of Tokyo, 2003) and BA in Psychology (Univ. of Tokyo, 1994). He has been a chairman of Userstudy Forum at IPSJ, Japan's leading CS community, since 2006.

LECTURES PROGRAM

Business Ethnography: Qualitative Research for Human-Centred Innovation

MSc Hiroshi Tamura (Innovation Lab., Hakuhodo Inc, Tokyo, Japan)

2009.05.20 [WED] - 12:00

University of Oviedo, EUITIO (Escuela Universitaria de Ingeniería Técnica Informática de Oviedo)
Calle de Valdés Salas, Oviedo
Salón de Actos

Public free event, no registration is required. Lectures are in English language. No translation service is available.

Summary

What is design thinking? Why design thinking is so important for innovation? Addressing these questions, our unique methods of ethnographic research will be introduced. We call the methods 'business ethnography,' which is basically consisted of two bodies: field-works and story-telling. Through various case studies, audiences are expected to understand why these two bodies are competent for people creating and exploiting innovative ideas which are off the map from technological innovation.

Enabling Technologies for Context-aware Computing

Dr. Yoshihiro Kawarara (Graduate School of Information Science and Technology, The University of Tokyo, Japan)

2009.05.22 [FRI] - 12:00

University of Oviedo, EPSIG (Escuela Politécnica Superior de Ingeniería de Gijón)
Aulario Norte, Viesques, Gijón
Sala de Grados

Public free event, no registration is required. Lectures are in English language. No translation service is available.

Summary

Due to the miniaturisation of sensing devices and computers, recent computer devices are aware of the situation of the human and environments. In a context-aware computing environment, tiny devices such as sensors are embedded in living spaces to collect real-world information and build a model of the real world in order to provide computer-controlled services. Using this repository of user and world contexts, users can reap the benefits of smart and attentive services provided by embedded computers. In this lecture, enabling technologies for context aware computing as well as state of the art research activities are introduced.

WORKSHOP PROGRAM

Creating Great Ideas for Lighting Design

MSc Hiroshi Tamura (Innovation Lab., Hakuhodo Inc, Tokyo, Japan)
&
Dr. Yoshihiro Kawarara (Graduate School of Information Science and Technology, The University of Tokyo, Japan)

2009.05.20/21/22 - 18:00/20:30

University of Oviedo, EUITIO (Escuela Universitaria de Ingeniería Técnica Informática de Oviedo)
Calle de Valdés Salas, Oviedo
Aula AB-02

Public free event, although due to the **LIMITED NUMBER** of places available (5 x four groups) **REGISTRATION IS REQUIRED** at www.euitio.uniovi.es . Lectures are in English language. No translation service is available.

Attendees are **asked to develop and submit a homework prior to the workshop**. Please read the Prerequisites section below!

Workshop Description and Goals

The workshop is divided in two parts and consists in a series of assignments for the attendees, which should **carried out in groups**.

In the first part of the workshop (first two days), attendees will learn human-centred thinking through developing ideas for lighting design. We believe 'light' is a potential resource for creative thinking because we don't usually take any notice of it consciously in everyday lives.

During the second part (third day), the attendees will learn the basics about control of peripheral devices including LED (Light Emitting Diode). This part will introduce how LED can be controlled by a computer. Participants are asked to design the colour and motion of LED in an ambient intelligence environment, and implement it.

Evaluation kit of LED-computer controlled system will be distributed to each group. You can see **an example of what can be done** in this video:

www.youtube.com/watch?v=13r-4XWHRwc

One laptop computer is required for each group. The OS of the computer must be Windows XP or 2000 (Vista is NG) and must have one USB port. **Basic knowledge of C language or any programing language** will be helpful (but not indispensable).

Prerequisites [very IMPORTANT!]

Observe how 'lighting' is fixed up in your everyday setting, take photos of it, and give interpretations of it. **At least three observations are required**. Historical considerations of lighting are solicited.

Download the ***Prerequisite Assignments for the Workshop*** document from www.hci-rg.com/en-conferences.htm full fill it and submit it to Hiroshi Tamura (email address included in the document).

Deadline: 2009.08.18.

References

- Wolfgang Schivelbusch, *Disenchanted Night: The Industrialization of Light in the Nineteenth Century*, Univ. of California Press, Berkeley, CA., 1995.
- Wolfgang Schivelbusch, *Licht Schein und Wahn: Auftritte der elektrischen Beleuchtung imJahrhundert* 20. , 1992cons.
- *TI MSP430 USB Stick Development Tool*: focus.ti.com/docs/toolsw/folders/print/ez430-f2013.html