

筑波大学

Research Center for Knowledge
Communities, University of Tsukuba

English abstracts (short)

The logo for the Information Science Workshop 2012. It features a large blue circle on the left containing white icons of a microscope, a test tube, and a cell. To the right of the circle, the letters 'ISW' are written in a large, blue, sans-serif font, with a small blue dot above the 'i'. The year '2012' is written in a smaller, blue, sans-serif font to the right of 'ISW'.

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The sight to the perception: media art and technology

Yoichi Ochiai

In order to give the criticism to visual media which surround our daily lives, I produce several media installation works. These works lead "super-vision". The author has tried to express the sense (e.g. optical illusions) beyond the visual experience with using the visual media equipment. With this concept, those works give the effects of body feeling or subjectivity to the visual media. In this paper, I describe the concept of super vision and introduce five works (made in 2011 & 2012) centering on the vision media with this concept. On each work, I describe an outline, the technology used in the work, related works and relation with the super-vision concept.

Keywords: Media Art, Media Installation

There without there - Listen to the voice of the voiceless insect.

Mei Yamaguchi

Around us is full of a variety of information. A method communicates with words and letters, tactile senses, sight, taste, smell and the information we have received. We know that we aren't the only living things that can send-receive information. In addition, we also know from experience that the transmission is among other species, rather than things that are done in allogeneic necessarily, the transmission of information request dog that wants to go for a walk or to be feed so that information transmitted to the owner. However, what about the small animals, like insects.

Insects in the transmission of information would be common experimental sex pheromone of the silkworm, *Bombyx mori* (A. Butenandt, 1961). Transfer some information to receive male sex pheromone emitted by females. This is the transmission of information between the same types. Information transmission is not necessarily the same kind that occurs only towards the previously mentioned, wonder what it the transfer of information and other insect species.

In this presentation will focus on the processing of the information through the Insects-plants interaction with the olfactory and taste sensory organs of insects.

Using Feature Selection in Classifier Ensemble for Cardiotocography Classification

Tipawan Silwattananusarn
Wanida Kanarkard Kulthida Tuamsuk

<The extended abstract of this presentation is available in English. Please see the other brochure.>

Wavelets having regularities beyond C^∞

Ion Uehara

<The extended abstract of this presentation is available in English. Please see the other brochure.>

View schema update problem for XML database

Chen Rong Nobutaka Suzuki

<The extended abstract of this presentation is available in English. Please see the other brochure.>

Illustrator search system based on user's impression categories

Kiyoto Miyajima Yohei Seki

We propose a method to search illustrators based on user's impression categories in illustration sharing SNS. Impression for the illustrator is estimated from social tags annotated on his/her illustrations. In this paper, we introduce illustrator search system, and clarify the effectiveness of the ranking strategy combining motifs and impressions for the illustrations through the experiments.

Keywords: Illustrator Search, Illustration Sharing SNS, Social Tag, Impression Tag, and Folksonomy.

Characterizing autonomy in the Web

Mizuki Oka

Using the idea of transfer entropy (TE), we study autonomy and information flow on the Web. Its phenomena include user action patterns and the rich, autonomous network dynamics sustained by human searching/posting behavior. Such dynamics show radically different behavior depending on the social context. It is widely accepted that Twitter messages - called "tweets" - and Google search queries react strongly to significant social movements and accidents, producing bursts of patterns. We call this the reactive mode of the Web. On the other hand, the Web has an intrinsic dynamics without bursting patterns. We call this the default mode of the Web. In this paper we study the default mode of the Web system, which we characterize via transfer entropy. The amount of information flow transferred between different sequences of queries as well as keyword frequencies is investigated. The default mode of the Web can then be characterized by the transfer entropy network dynamics amongst keywords. We use this idea of the default mode to install autonomy into generic a- life systems.

Identification of works of manga using LOD resources - an experimental study to FRBRize bibliographic data at Kyoto International Manga Museum using DBpedia

Wenling He

<The extended abstract of this presentation is available in English. Please see the other brochure.>

Budget control of public libraries and school libraries

Naoya Mitani

Both the budgets of the public libraries and the school libraries are disbursed by the tax revenue for the local government finance. However, the tax revenues for the national and local government finance are decreasing and the annual expenditure is increasing in Japan. The budget allocated to the public libraries and the school libraries is decreasing year by year. It becomes more important for the both libraries to propose a better way to control the budget more efficiently. Therefore, I focus on the budget control of the public libraries and the school libraries. First, I will survey how and by whom the budget allocated to the both libraries is made. Second, I plan to evaluate the both libraries'

services and management by using JIS X 0812: 2012 that is setting up the indexes to estimate the performance of the both libraries. Third, I will examine the case study of cooperation and integration of the school libraries and the public libraries in Japan and USA.

The information architecture of research
information storage and retrieval system

Nongram Mueanrit Wasu Chaopannon Lampang Manmart

< The extended abstract of this presentation is available in English. Please see the other brochure.>

Constraint can affect human perception, behaviour,
and performance of search

Kazuya Fujikawa Hideo Joho Shin'ichi Nakayama

< The extended abstract of this presentation is available in English. Please see the other brochure.>

Linking digital archives: Visualizing digital archive metadata
to help users find and access

Shingo Nakano

Sharing annotation of digital manga on the social web using
path expression for addressing manga object

Kaori Ochiai Tetsuya Mihara
Mitsuharu Nagamori Shigeo Sugimoto

Many people use social reading services on the Internet, which enable us to share annotations attached to electronic books and articles. Those annotations can be precisely linked to any portion of the electronic resources. Digital manga, which is becoming popular, has a feature different from text-centric resources because annotation writers need to specify visual objects as well as textual objects, such as frames, onomatopoeia and emotional symbols. In this research, we propose a viewer

for digital manga designed based on the Manga Metadata Framework (MMF) and Manga Path Expression (MPE) developed in the author's laboratory. MMF defines a metadata model to describe all constructs of manga including those of visual objects such as frames, texts, characters, onomatopoeia, and so on. MPE is a path expression to address any visual component of manga. MMF and MPE are the base technology in the social reading environment where annotation on manga is essential. The annotations can be shared not only among the participants of social reading but also with participants of the social web, e.g., twitter.

An experimentally modeling and a test of metadata evaluation for library and museum collections: study for an analysis of factors contributing to the evaluation laboriousness

Kazunori Yashiro

Metadata is "data about data" in classic. Today, this meaning is extended to broad range, rather than being a "data", it is a "something" or "collection" or "information resource". For instance, in the library, collection catalogue and bibliographic records are called metadata, that is "data about information resource (or collection)".

Library's "information resource" or "collection" metadata is created by method of copy from existing master record as a result of the widespread availability of library system. Any copy entail valuation of the master record. Then, as necessary, modify the master record. That called "record fix" in a Japanese bibliographic control network.

Evaluation is not always include modification like a "record fix". Other evaluation is, for instance, "source criticism"(in German, "quellenkritik") in the fields of cultural "information resource" (especially, museum and archives collection) and resource's metadata. "source criticism" is non-modify evaluation.

This study tries to analyze the factors that contribute the amount of work and difficulty of metadata evaluation in the two cases (modify/non-modify) by three steps experiment. The first step, pre-experiment aims to analysis about attribute of subject. The second step, qualitative experiment aims to analysis about independent variable. The last step, quantitative experiment aims to test the assumption that obtained by previous experimental data.

This presentation, speak about two topics in the research roadmap. First, tried to modeling the metadata evaluation, for organize the experiment to analysis the factors. Second, did trial of pre-experiment use some library collection metadata on a library system by library course student of a junior college.

Book selection process of users in an academic library

Yuriko Ikawa

The purpose of this study is to understand the book selection process of students in an academic library. The process consists of the following steps: searching books by online catalog, identifying needed books among search results, looking for them in the shelves, making a decision of whether he/she uses them or not, and loan-out, etc. It is predicted that the process has tacit rules included some pattern or tendency. In online catalog search, there are many research about system development or transaction logs, but little about the whole process from search to actual use. In this study, I focus on books, which are basic materials for libraries and also for students' learning. By exploring the book selection process, the result will contribute to considering online catalog usage and improvement of the system from the aspect of users. In regard to book usage, a relation with ebooks is also important. Although libraries have recently introduced ebooks, it is not still common that students use ebooks. I plan to consider the similarities and differences between them, and some strategies to promote using ebooks.

Extracting Metadata from HTML Documents using XPath and Metadata Schema

Tsunagu Honma

< The extended abstract of this presentation is available in English. Please see the other brochure.>
