Some Information Systems and Projects of Kyoto University

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Abstract

In this paper, some of computer related organizations and projects of Kyoto University are summarized.

1. CIMS: Center for Information and Multimedia Studies

This organization used to be the center for computer education. In 1997, research division became bigger and the following functions are being offered.

- A study environment of multimedia education: Open-Space Laboratory, Active Language Learning.
- To support the development of teaching materials.
- To support distance learning.
- To develop a more advanced information media.

2. TIDE Project between Kyoto University and UCLA

TIDE (Trans-pacific Interactive Distance Education Project) started in 1999, which enables Kyoto students and UCLA students interact each other at the same time, beyond the ocean, by connecting each classroom with ultra-high speed network provided by NTT Co. Ltd.

3. KUINS-II

KUINS (Kyoto University Integrated Information Network System) connects the main campus, Uji campus and Kumatori, Inuyama, Otsu areas, where some organizations of the university are located. Fig. 2 shows the KUINS-II network organization.

4. Human embryo project

The purpose of the project is to share and use 3D models of human embryo for developing more elaborate courseware for different classes at different universities.

Typical characteristics of the project are as follows.

- 3D models of each stage of human embryo are developed based on the measured data of real samples by Kyoto University’s MRI.
- The sequence of human embryo development is generated by removing the individual differences of the samples.
- These models are developed under consultation with medical doctors at Kyoto University, and have academic reliability.
Kyoto University delivers 3D models of human embryo to the participating universities. Each university can develop WEB-based course material by itself. During the development period, several meetings will be organized to discuss how to develop the courseware.

Fig. 3 shows a snapshot of the movie generated by the system.

5. VLSI design project (Calat-Parthenon project)

The purpose of this project is to share and use WEB-based courseware for VLSI design.

It is a Simulation System, which consists of PARTHENON and CALAT (courseware on PARTHENON used in Kyoto University for research and education). It provide Calat-Parthenon environment to the members of this project. Each university can plan a class using Carat-Parthenon as a practice tool. Questions about the environment are answered by the Kyoto University stuffs. Research meeting are organized to exchange information and discuss research topics related to this project.

Present Participants are as follows.
- King Mongkut’s Institute of Technology (Thailand)
- Chulalongkorn University (Thailand)
- Mahanakorn University of Technology (Thailand)
- University of the Philippines
- Multimedia University (Malaysia)
- Seoul National University (Korea)

6. Digital Library

The Digital Library of Kyoto University started in 1994, which is one of the oldest DL’s in the world.
- Digitization of the printed contents, such as old books and pictures owned by the university.
- Human-oriented information system is developed, in which we can find required information by utilizing a linkage of related information and multi-media function.

![Fig. 3 Human embryo development](image1.png)

![Fig. 4 User interface for the digital library](image2.png)