

Title	検索システムとVRMLによる北陸先端科学技術大学院大学ナビゲーションシステムの構築
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Citation	
Issue Date	2000-03
Type	Thesis or Dissertation
Text version	none
URL	http://hdl.handle.net/10119/671
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Retrieval and Navigation on Virtual JAIST

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March 2000

keywords: knowledge, network, VRML, retrieval system, WWW.

In this paper, we propose and construct a guide system of JAIST on WWW which is called "Virtual JAIST" in terms of knowledge representation. For this purpose we develop 3D model of JAIST for navigating the user and Keyword Retrieval system for finding laboratories that the user is interested in. Then they are integrated as a guide system using VRML and Web technologies.

JAIST is situated in Hokuriku area which is more than several hundred km far from big cities in Japan such as Tokyo, Osaka, Nagoya, Fukuoka and so on. This means that visiting JAIST is not easy for most people including foreigners because of taking much time and travel expenses. On one hand it is true that JAIST has such the disadvantage. However, on the other hand physical and functional environments in JAIST are very excellent for research and education. Our Virtual JAIST is one of solutions to facilitate the advantage and overcome the disadvantage because Virtual JAIST can give the user very realistic image and atmosphere of JAIST comparing with normal Home Page on WWW which is described with texts and images. In this context we would like to say that we change the traditional Information Network into Knowledge Network. Specially it is expected that Virtual JAIST affect the increase of undergraduate students who want to enter to JAIST.

Our system consists of the following two parts: Navigation system and Retrieval search system. The navigation system consists of the following three functions.

è Navigate to the destination in Virtual JAIST

è Hyperlink from VRML object

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è Free walkthrough in cyberspace

The retrieval search system consists of two following functions.

è Full text retrieval search

è Search for laboratories by keywords

Using our system the user can search laboratories by giving keywords he/she is interested in to the system and is navigated in Virtual JAIST. We can access this system from any place on the Internet.

In conclusion, through this system we expect that JAIST's enrollments will increase. In the future, we would like to construct the inside of JAIST and improve the algorithm for retrieval search system.