Essay
Let's Search IEICE Contents through New Meta-Data System “I-Scover”!

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Prologue
IEICE launched the new metadata search system called “I-Scover” on April 3, 2013 [1]. For the time being, I-Scover provides the metadata search service of all papers published in IEICE transactions covering from the first edition published in 1968 up to the present edition, Technical Reports (from 2006) and international conference papers of ISPA and EMC. The total number of searchable contents reaches 150,000 as listed in Table 1.

This article briefly introduces I-Scover. Before going to the details, let me start with a quiz. What phrase do you guess if you say “I-Scover” for three times?

Table 1 The coverage of IEICE contents by I-Scover

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<th>Publication/event</th>
<th>Coverage</th>
<th>Number of articles</th>
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<tr>
<td>IEICE Transactions (including Japanese Editions)</td>
<td>Papers published since January 1968</td>
<td>About 68,000</td>
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<tr>
<td>IEICE Technical Reports</td>
<td>Conferences/Symposia/Workshops/Colloquia held since June 2004</td>
<td>About 80,000</td>
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<td>IEICE General/Society Conferences</td>
<td>IEICE General/Society Conferences held since 2005</td>
<td>About 40,000</td>
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<tr>
<td>EMC (International Symposium on Electromagnetic Compatibility)</td>
<td>Symposia held in 2004 and 2009</td>
<td>About 400</td>
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What is I-Scover?
The I-Scover is officially designated as the IEICE Knowledge Discovery. Here you can expect a little more meaning; that is a fortunate stroke of serendipity in I-Scover. It will be easy to discover an article which it has been considered difficult to find out with the current Web search systems.

What distinguishes I-Scover from search systems like Google or Yahoo is that I-Scover does not search across whole contents as well as a well-known full-text search, but it provides the metadata search capabilities of IEICE articles. Further, all the metadata can be stored in the data base as Linked Data in I-Scover.

I-Scover connects not only related metadata within stored ones, but also related data on the Web. This feature is known as Linked Data. According to Wikipedia, the term is used to describe a recommended best practice for exposing, sharing, and connecting pieces of data, information, and knowledge on the Semantic Web using Uniform Resource Identifier (URI) and Resource Description Framework (RDF).

At the current release of I-Scover, the function known as SPARQL Protocol and RDF Query Language (SPARQL) query, is not supported yet. But all data are stored in Linked data format, or more precisely in RDF [2].

Scheme of I-Scover
Fig.1 shows the top page of I-Scover (See it at http://i-scover.ieice.org/?lang=en). The search window provides a basic search that accepts a single search word. If you wish multiple terms search, then push “Advanced search” link.

Fig.2 Example of multiple search results drawn by I-Scover
I-Scover first estimates search results through six metadata, i.e., article, author, organization, keyword, event and publication. When I-Scover finds out multiple search results, it shows the results along with related articles as shown in Fig.2. On clicking a term at your request, I-Scover immediately displays the results in four different windows; Metadata detail, Related metadata, Related articles and External website search results windows. Fig.3 illustrates an example of keyword metadata. I-Scover outputs not only detail description of the search results, but also it exposes links to the other data. The Linked Data feature of I-Scover enables the provided links to be connected within I-Scover providing continuous exploration of related data, and the following searches.
-Keywords of a designated author's article(s)
-Authors of articles having a designated keyword
-Keywords given to each of articles in a designated event
-Keywords of other articles having one of keywords of a designated article

The above usages may lead serendipity; i.e., when you are looking for something, you will find something of value talent in another. Moreover, the external Website search let you search from CiNii (Scholarly and Academic Information Navigator) by National Institute of Informatics (NII), Google, IEEE Xplorer, ACM Digital Library, and DBpedia.
Let’s try I-Scover!

I-Scover is available for anyone without charge. I-Scover works as usual Web search systems. Please note, however, I-Scover does not provide a multiple-terms-search service in the basic search process. When you need search with multiple words, please click “Advanced search”. If you have an IEICE membership, we recommend you to login. I-Scover advances some of privileges to IEICE members.

A minor upgrade will be arranged to the first version in October 2013. Your idea and constructive opinions of expected functions are welcome to enhance I-Scover capabilities. Please inform us of your idea via the “Contact” link in the bottom (footer) page. By the way, the answer to the question in Prologue is “I discover.” We hope you will discover treasures of IEICE articles with selendipity.

Reference

Hot Topics
The First IEICE Sponsored Lecture Meeting Successfully Held on the Occasion of the Vietnam Section Inauguration Ceremony

Xuan-Tu Tran, Assoc. Prof. Dr., Deputy Head, UET-Key Lab. for Smart Integrated Systems
VNU University of Engineering and Technology, Hanoi, Vietnam

IEICE Vietnam Section was authorized by IEICE and established last December. The primary intention of the Section establishment is to accelerate academic activities of Vietnamese society in the field of electronics, information and communication technologies through paper publication, participation in conferences, symposiums, workshops and provision of IEICE sponsored lectures, and simultaneously foster next generation of researchers in collaboration with IEICE. The first event, IEICE sponsored Lecture Meeting was planned and held by the Section on the occasion of the inauguration ceremony of the Section, at VNU University of Engineering and Technology (VNU-UET), in Hanoi, Vietnam on March 15, 2013.

The number of participants in both Inauguration Ceremony and Lecture Meeting reached 82. In the Lecture Meeting, 13 guests from Japan, 13 guests from Vietnam, and 5 guests from other countries, about 30 guest lectures were provided during the Conference. For the details, please visit http://www.ieice.org/eng/global_plaza/index.html.

Message from TFIPP Secretariat
This issue is delivered also by a free mail magazine “IEICE Global Plaza on Line” with updated news of interest for you.

IEICE Society Conference will be held at Fukuoka Institute of Technology, in Fukuoka, Japan, on September 17-20, 2013. The consecutive complete English Session BS-7 entitled “Design, Control, and Management of Network and Service” will be provided during the Conference. For the details, please visit http://www.toyoag.co.jp/ieice/E_S_top/e_s_top.html.

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