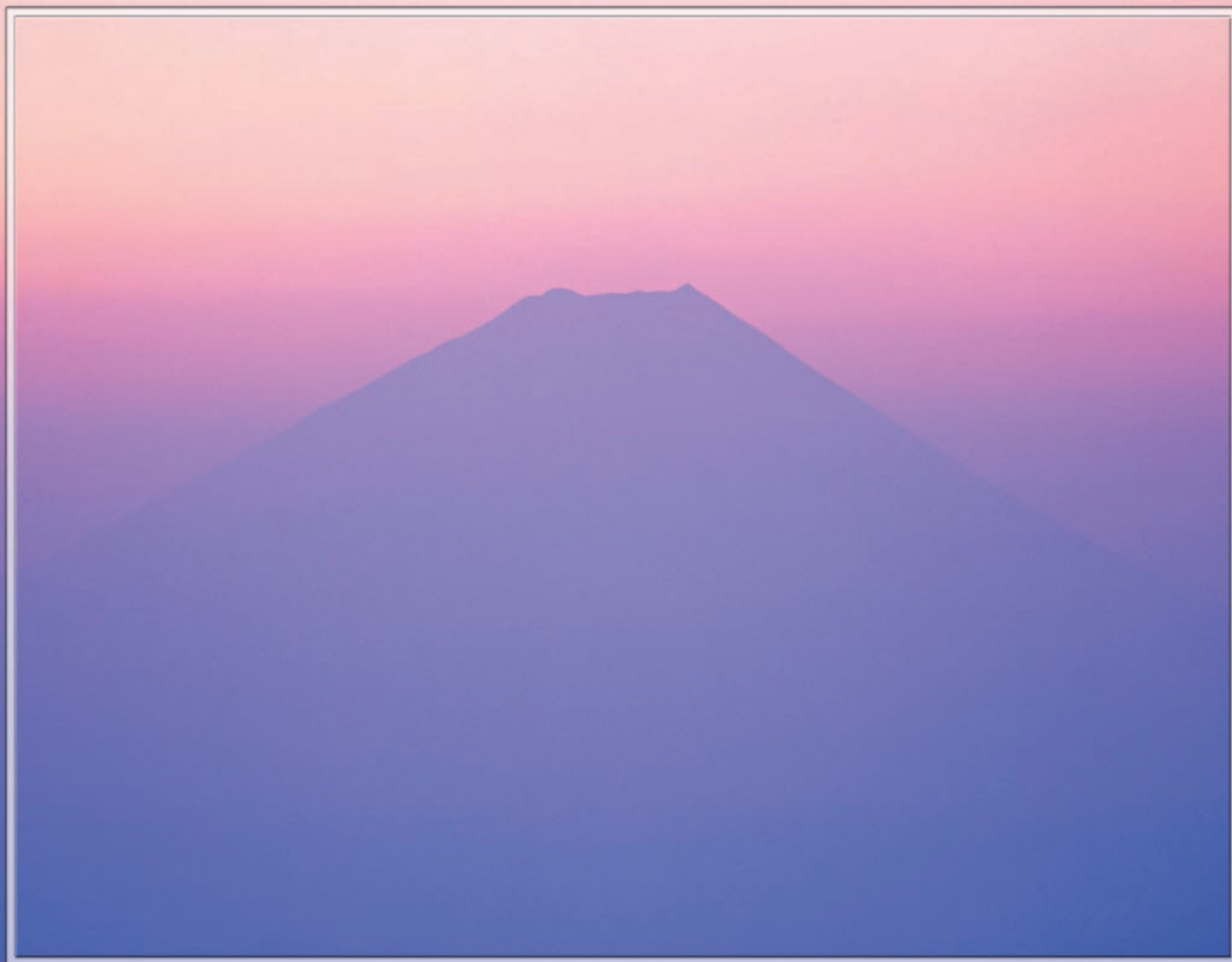


National Institute of Informatics News

No.13
2005



Prefatory note

Inauguration Address Masao Sakauchi (Director General, NII)
Resignation Address Yasuharu Suematsu (Former Director General, NII)

Joint research No.7

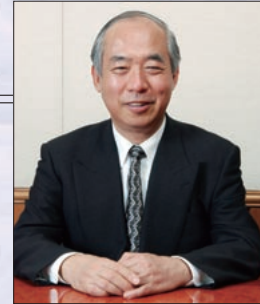
Research on Keyword-map Information Visualization Systems for the Application of Interactive Information Collection Tsuyoshi Murata (NII)

- 4 Research & Education** Assisting Human Information and Communication Activities by Computer / National Institute of Informatics "Informatics Open Forum" 4th <Jan 31, 2005 > • International Scholarly Communication Initiative and Japanese Mathematical Journals • The World Digital Mathematical Library : an infrastructure need of the mathematical sciences / The annual meeting on the research project "Informatics Studies for the foundations of IT evolution (FY2001-2006)" / The 22nd Symposium on Informatics "ITS as a Social Information System" / Workshop Held : "Creating Business Models for Electronic Journals and current Publishing initiatives in the Scholarly Communications" / Message from NII Researcher
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Inauguration Address

Masao Sakauchi

Director General, National Institute of Informatics



On April 1, 2005, I took office as Director General of the National Institute of Informatics (NII). Assuming this great responsibility, I am obligated and determined to fulfill NII's mission of contributing to society by further promoting the activities launched by my predecessors: Dr. Suematsu and Dr. Inose, the second and first NII Directors General, in collaboration with those in the academic community, including universities, and the faculty and other Institute staff members.

Last year, national universities became independent administrative entities. In this recent trend, the fundamental question appears to be "What role will the academic community serve within society?" To answer this question, each research organization within the academic community must clarify its roles and mission, plan and implement its own unique activities, and effectively communicate its achievements to the general public.

NII's missions and characteristic roles can be understood as follows: to "create future value (academic creation)" in the new scholarly field of informatics, as the only academic research institute dedicated to this field; to serve as a national center for informatics as a member of the Inter-University Research Institutions; to deploy and develop an infrastructure for the circulation of scholarly information (advanced scholarly information networks and content), which is currently regarded as essential for research and education throughout the academic community; and to develop human resources and contribute to society and international development through such activities.

To address specifically the creation of future value: After the decade characterized by the IT boom and the bursting of IT bubble, it is now apparent that the mission of informatics-related fields must be to solve difficult problems or issues that represent bottlenecks in the creation of innovative real value for people and society. In this regard, the mission of and expectations for informatics research activities have become increasingly demanding.

Next, as a national center for informatics: For Japan to take the international leadership in the field of informatics, it is essential that we share visions and coordinate various activities among universities, research institutes, industrial circles, government bodies, and citizens working as a unit throughout the country. Now that it has become an independent entity, NII is expected to fulfill much weightier responsibilities as a member of the Inter-University Research Institutions, connecting relevant organizations competing under certain conditions.

As an infrastructure for the circulation of advanced scholarly information: The infrastructure for circulating scholarly, research, and educational information is increasingly recognized as a crucial factor in determining the international competitiveness of research, education, and industrial activities. The construction of a next-generation information infrastructure that systematically integrates ultrahigh-speed networks, research resources, and shared software/databases derived from research activities represents the single most urgent and crucial challenge for Japan, as is apparent from examples in the U.S. and Europe. We strongly believe in the importance of rapidly and seamlessly linking current operations to develop the scholarly information infrastructure for the next generation of efforts.

As stated above, the NII's missions at this juncture appear to have expanded significantly beyond expectations, five years after its foundation. To fulfill those missions, we must further invigorate our activities. Through discussion with those in the academic community throughout the country, information/system research institutes, and NII personnel, we are more determined than ever before to make sustained progress. We look forward to your continued understanding and support.

Resignation Address



Yasuharu Suematsu

Former Director General, National Institute of Informatics

My term of office expired at the end of this past fiscal year, and I have resigned the post of Director General.

Looking back, we see several reorganization and expansion efforts following the establishment of the National Center for Science Information Systems, our parent organization. Through the ceaseless efforts of Dr. Hiroshi Inose, the first Director General, the National Institute of Informatics was established in April 2000 as an inter-university research institution under the (former) Ministry of Education. Designed to promote research in informatics to provide an academic foundation for the information age and to serve as a central informatics research institute to implement various operations involving the advanced distribution of scholarly information, it represents a unique institute advocating “advancing researches and operations in tandem.” However, in October of the same year, the strain of his duties took its toll, and Dr. Inose, Director General, passed away. I subsequently assumed office as the second Director General of the Institute in April 2001, and immediately began traversing the rough sea of transitions – tasks involving, for the most part, getting things off the ground in the first days of the Institute, becoming an independent administrative entity as well as the organization.

In 2002, SuperSINET, at 10 Gbps the world’s fastest network at the time, was inaugurated. The Webcat-Plus launch met with a warm reception. Work began on GeNii, the scholarly content portal. We also inaugurated the Department of Informatics in the Graduate University for Advanced Studies, and with support from the newly-established Hatori Foundation and in partnership with the International Course within the Ph.D. Program in Informatics, we established a system for matriculating outstanding foreign students. The year 2003 saw the launch of the National Research Grid Initiative (NAREGI) and the International Scholarly Communication Initiative (SPARC/JAPAN). Meanwhile, in coordination with efforts to turn national universities into independent administrative entities, proposals were examined to turn the Inter-University Research Institutes into independent entities, with final determination to integrate the various Institutes into four separate independent entities. The NII has been part of the Research Organization of Information and Systems since April 2004, a transition that turned staff members from national government employees into non-government employees. The NII is now expected to make significant contributions to the Frontier Science Interdisciplinary Research Center established within the Organization. Additionally, in-depth discussions are now underway to develop an appropriate response to the Third Science and Technology Basic Plan currently under preparation.

The NII is a unique research institution, promoting both research and operational activities in close coordination, generating trust and strong bonds between the faculty and the administrative staff. It is my hope that this relationship will grow even stronger. Dr. Masao Sakauchi, the new Director General, is an outstanding figure who brings with him impressive research achievements, experience in administrative matters, and dedication and seriousness of purpose as a member of various committees. NII is still in its infancy and has many issues yet to be resolved. It is my hope that the NII will tackle the various challenges ahead under the leadership of the new Director General. Last, but certainly not least, to conclude my retirement address, I wish to express my heartfelt gratitude for the enthusiastic efforts and kind support of the following individuals: the staff members of the Ministry of Education, Culture, Sports, Science and Technology, Dr. Wataru Mori, chairman of the Committee and Committee personnel, Dr. Mitsutoshi Sawa, former Deputy Director General, Dr. Masao Sakauchi, Deputy Director General, Dr. Kinji Ono, former Executive Director of Research, Dr. Mitsutoshi Hatori, former Director of the Development and Operations Department, Dr. Yoichi Tokura, Director of the Development and Operations Department, Dr. Masamitsu Negishi, Director of the International and Research Cooperation Department, Dr. Haruki Ueno, Chairman, Department of Informatics, and Directors of Divisions, Mr. Norio Matsuoka, former Administration Department Director, Mr. Hideo Chiba, former Administration Department Director, and Mr. Michitoshi Sekura, Director of the Administration Department, as well as all of our faculty staff members.

Research on Keyword-map Information Visualization Systems for the Application of Interactive Information Collection

Several attempts have been made for the development of systems that visualize searched results of massive documents or Web pages. Clarifying the roles of visual information in the processes of intelligent activities is one of the major goals of artificial intelligence and cognitive science. Development of visualization systems is expected to contribute to the goal. In addition, many interesting and challenging research targets (such as the methods for detecting/tracking topics) lie in the development of visualization systems that treat dynamic information. Joint research about information visualization systems is in progress with Prof. Yasufumi Takama, Associate Professor of Tokyo Metropolitan Institute of Technology.

Keyword-map information visualization system that we are developing locates keywords extracted from documents on two-dimensional space based on co-occurrence in the documents. It is pointed out that such visualization is suitable for showing weak structures that are present in the Web space. Prof. Takama has been working on the research of keyword-map information visualization systems, such as the methods for discovering landmark terms that enable detection of keyword clusters, and methods for detecting information streams from the family of time-series document sets.

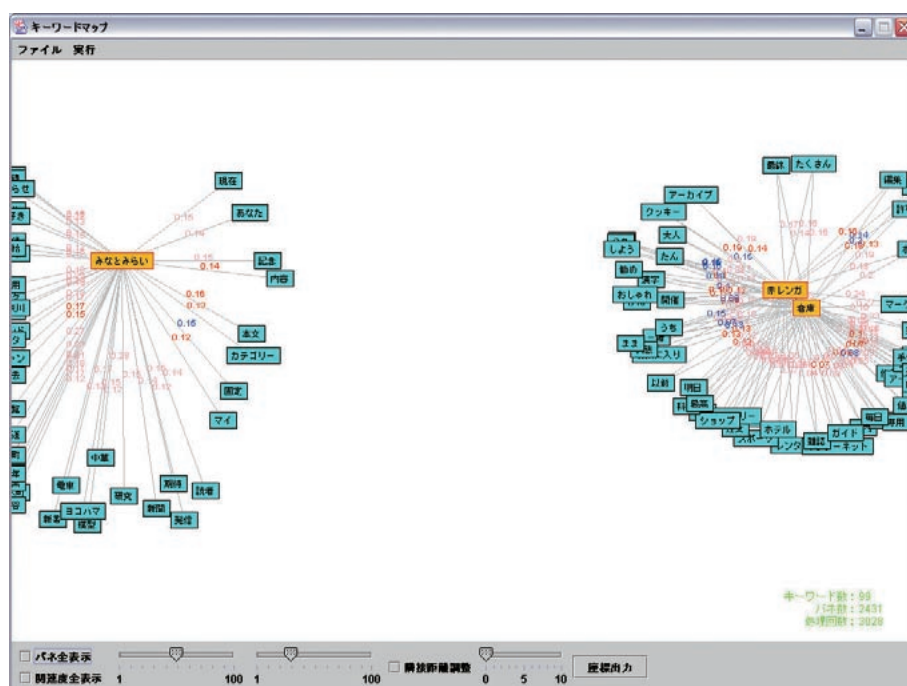
The goals of this joint research are to realize estimation of users' interests and to enable interactive information collection. The goals are expected to be achieved by adding functions for users' manipulation of keyword locations on

the visualization system. Although relevance feedback is well-known method for interactive information collection, it often gives many burden users since the method requires users' evaluation of each searched documents. In this joint research, our target visualization system estimates users' interest implicitly from the manipulation of location of keywords, which gives fewer burdens to users. The followings are concrete contents of our joint work:

- 1) Improvement of keyword-map information visualization system that has been developed by adding functions for users' arrangement and edition of keywords. Functions for recording information that are needed for estimating users' interests are also added. Methods for information acquisition from search engines are developed and implemented.
- 2) Making experiments by asking users to use the system. Algorithms for estimating users' interests are developed from the results of experiments.
- 3) Interactive information collection system based on keyword-map information visualization is developed based on the results of 1) and 2).

An example of keyword-map information visualization of blog (Bulkfeeds) is shown. Suppose a user locates "red brick" and "warehouse" away from "Minato-Mirai". As the result of the manipulation, these two topics are regarded as distinct ones and two groups of co-occurring words are presented.

(Tsuyoshi Murata, Associate Professor, Intelligent Systems Research Division)



Assisting Human Information and Communication Activities by Computer

Research Introduction

Computers and networks enrich and facilitate our life so that they now become indispensable for our life. They sometimes enhance our traditional daily activities with their increasing computing and networking power like documenting and communicating with other people, and sometime offer new ways for our activities with new technologies like WWW. On the other hand, most people become to live with worry that unceasing improvement of computers and networks and installation of new software technologies would change their life and business.

It is not because of such technologies themselves but because of our vision to technologies. We are so eager to develop new technologies that we almost lose the original mission for development of technologies, i.e., technologies just for us.

We should shift our focus from information and communication technologies (ICT) to information and communication activities (ICA). We should investigate what are human activities on information and communication and how we can assist people in these activities.

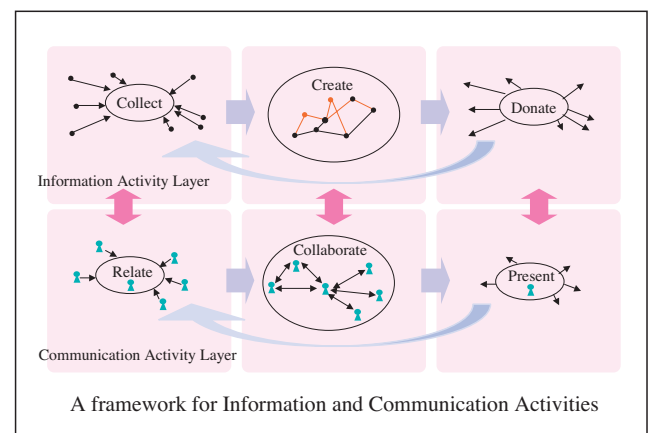
I propose two-layered model as human information and communication activities. The first layer has three elements that concern information handling, i.e., Collect (information), Create (information) and Donate (information). It shows user-centered view of life cycle of information (see Figure 1). Information is collected, then new information is created based on the collected information, and finally created information is donated to the society for future creation.

The second layer has also three elements that concern communication handling, i.e., Relate (people), Collaborate (with people) and Present (people). It is communication-centered view of the above process. People establish relationship with other people, then collaborate with them to create new information, and finally present themselves as donor of new information. Having both information and

communication layers is not redundant. What we refer as "information" in the context of computer technologies is stored data in computers, while human is the source of "information" in the broader sense, i.e., human can offer information dynamically. We should consider communication in order to include the function "human as information source". This parallel view of information and communication activities has thus six categories as activities. Ideally all categories should be supported by computers. Some categories like Collect is well investigated, but others are not. In particular, the three categories in the communication layer should be investigated more.

We are now focusing on how to realize assisting these activities coherently. Our research topics varies from basic studies such as discovering relationship among people and among information sources and reconfiguring human network in a distributed environment, to more practical studies such as social network based scheduling systems and communication facilitating systems with weblog (Semblog Project).

Please refer our web site for further information (<http://www-kasm.nii.ac.jp/>).



(Hideaki Takeda, Professor, Research Center for Testbeds and Prototyping)

International Scholarly Communication Initiative and Japanese Mathematical Journals

National Institute of Informatics
Informatics Open Forum
4th <Jan 31, 2005 >



Professor in Software Research Division, and
Director of Research Center for Information Resources

Jun Adachi

Jun Adachi is a professor of National Institute of Informatics. He is also an adjunct professor of the Graduate School of Information Science and Technology, University of Tokyo. His research interests are information retrieval, digital library systems, and distributed information systems.

Adachi received a BE, ME and Doctor of Engineering in Electrical Engineering from University of Tokyo in 1976, 1978 and 1981, respectively. He is a member of IPSJ, IEICE, IEEE, and ACM.

NII launched a new initiative titled the International Scholarly Communication Initiative (ISCI) in April 2004, working in close cooperation with university libraries and aiming at a broader dissemination of electronic journals published by Japanese academic societies.

In this initiative, we promote the dissemination and publication of Japanese acknowledged scholarly journals in electronic form over the Internet, eventually resulting in the

increase of journals' visibility and proper evaluation of Japanese research activities.

We are trying to provide Japanese prestigious mathematical journals through Euclid, a mathematical e-journal portal operated by Cornell University Library. In this talk, these topics were introduced as well as related activities worldwide.

The World Digital Mathematical Library : an infrastructure need of the mathematical sciences

National Institute of Informatics
Informatics Open Forum
4th <Jan 31, 2005 >



Professor, University of Illinois at Urbana-Champaign,
former director of the Division of Mathematical Science (DMS)
of the National Science Foundation (NSF)

Philippe Tondeur

Philippe Tondeur served as Director of the Division of Mathematical Sciences at the National Science Foundation from 1999-2002. Before being appointed to that position, he chaired the Department of Mathematics at the University of Illinois in Urbana-Champaign (UIUC) from 1996-1999. His current interests include mathematics and science education, science policy and governance, and leadership development.

Dr. Tondeur joined the UIUC faculty in 1968, where he became a Full Professor in 1970, and an Emeritus Professor in 2002. He earned his Ph.D. degree in Mathematics from the University of Zurich in 1961, and subsequently was a Research Fellow and Lecturer at the University of Paris, Harvard University, the University of California

at Berkeley and Wesleyan University, before joining the UIUC faculty.

Dr. Tondeur's research interests are in differential geometry, in particular the geometry of foliations and applications of partial differential equations in geometry. His 100 mathematical publications include nine books, some of which are by now standard reference books on foliations. During the past 40 years, he has presented approximately 200 invited lectures or seminars at various institutions around the world.

This talk discusses a critical infrastructure need of the mathematical sciences, namely the access to the legacy of scholarly research published in the journals devoted to the mathematical sciences over the last three and a half centuries.

We put this in the context of a strategy for global science, in particular for the role of the mathematical sciences in the science enterprise. This role is to enrich an already deep and broad fundamental science and engineering knowledge base,

to develop a globally engaged workforce of scientists, engineers, and well-prepared citizens, as well as to provide a widely accessible science and engineering infrastructure.

We describe current efforts to capture the world's scholarly mathematical literature. A major undertaking is the coordination under the umbrella of the International Mathematical Union of the many digitization efforts proceeding across the world.

The annual meeting on the research project "Informatics Studies for the foundations of IT evolution (FY2001-2006)"

The annual meeting on the research project "Informatics Studies for the foundations of IT evolution (FY2001-2006)" was held from 12th to 13th of January, 2005, at National Center of Sciences Building. The project is supported by MEXT (Ministry of Education, Culture, Sports, Science and Technology) under "Grant-in-Aid for Scientific Research on Priority Areas." The aim of the project is to establish interdisciplinary academic foundation of informatics studies. As an inter-university organization of informatics, NII has also been actively supporting the project.

In the meeting, six research groups, that constitute the whole project, organized group meetings where the outcomes and the current status of the research, as well as



Panel Discussion

the plans for the future advancement, were actively discussed. About 100 nationwide subgroups of researchers participated in the meeting including 9 from NII. In the afternoon of 13th, an open symposium was held at Hitotsubashi Memorial Hall. First, research progress of the current fiscal year was summarized by each leader of the six research groups followed by panel discussion focusing on the plans and promotions for FY2007. The symposium was successfully closed by Professor Yuichiro Anzai, Keio University, the leader of the whole project.

(URL: <http://research.nii.ac.jp/kaken-johogaku/>)



Closing remarks by the project leader, Professor Yuichiro Anzai

(Akiko Aizawa, Professor, Research Center for Information Resources)

■ The 22nd Symposium on Informatics “ITS as a Social Information System”

The 22nd Symposium on Informatics was held from January 21 to 22, 2005, at Science Council of Japan Auditorium. "The Symposium on Informatics" aims at facilitating information exchange and promoting advanced utilization of information in the network society. Since the starting in 1984, the symposium has been cosponsored and cooperated by many academic organizations. This year, the symposium focused on the relationship between informatics researches

and social infrastructure systems. The two days program contained two keynote lectures, eight invited lectures, and many other oral and poster presentations. On the first day, Professor Masao Sakauchi, Deputy Director General of NII, gave a keynote lecture entitled “ITS as a Social Information System” and many participants listened attentively to about the social impact and the recent research trend of ITS.

(Akiko Aizawa, Professor, Research Center for Information Resources)

■ Workshop Held : “Creating Business Models for Electronic Journals and current Publishing initiatives in the Scholarly Communications”

The International Scholarly Communication Initiative hosted the workshop above on Thursday, January 27, 2005, in Conference Room #5 on the 9th floor of the Japan Education Center.

The lecturers invited to speak at this workshop were Teresa Ehling, Director of Electronic Publishing, Cornell University Library, and Judy Luther, President of Informed Strategies.

In the first half of the workshop, Ms. Ehling presented an overview of electronic publishing activities at the Cornell University Library. Ms. Luther addressed the need for building business models for e-journals, speaking from the perspective of an electronic publishing consultant.

In the second half, following presentation of reports on the current topics of partner journals of international scholarly Communication Initiative in three different fields, reports were presented on trends in scholarly journals from the perspective of university libraries. In this workshop, editors from academic societies, members of university secretariats, university librarian, and production staff members at scholarly journals gathered to exchange in-depth views on electric journal publishing and creating business models.

The topics and materials covered in this workshop are available at the Web site of the International Scholarly Communication Initiative (<http://www.nii.ac.jp/sparc/>).

(Contents Division)



Ms. Teresa Ehling



Ms. Judy Luther

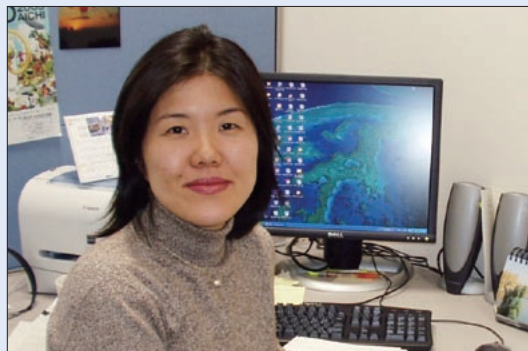
NII MESSAGE FROM NII RESEARCHER

Project Researcher,
Research Center for Information Resources

Haruko Ishikawa

1992 Bachelor of Science, Department of Physics at Gakushuin University
2000 Ph.D., Division of Mechanical Engineering, School of Engineering,
University of Queensland

After studying and working abroad for 11 years, I returned to Japan in November 2003 as a post-doc in the NTCIR project. My research career has been relatively brief, and I'd never been professionally affiliated with a research institute for information technologies. Immediately before returning to Japan, I worked on thermodynamic analyses of acoustic refrigerators and heat exchangers at the Universite Pierre & Marie Curie and LIMSI-CNRS in France, following a short stint with simulations of gas distribution for mining fields at the Exploration & Mining at the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Australia. I've long held an interest in, or rather a yearning for, research in the field of information technology. I



was fortunate to come across Web recruitment ads seeking NII post-docs. After joining NII, my primary responsibilities in the first half of the term involved NTCIR and NTCIR Web Task operations. In the second half, I've been working on analyzing relationships between types of search tasks/Web-page styles and search methods, based on results from NTCIR4-Web Task operations. Since data analysis and evaluation methods are interdisciplinary and share common features, my participation in the project has provided both great interest and pleasure. I will make every effort to make the rest of my assigned tasks even more fruitful.

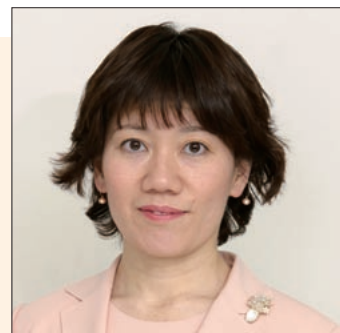
Graduate Education

Message from Graduate Students

Keiko Kamioka

A second-year student in the Ph.D. Program in Informatics,
the Graduate University for Advanced Studies (Faculty adviser: Professor Shigeki Yamada)

I recall wishing that the computers in my university's computer club could say "I know how you feel." That was when I first began thinking I wanted to know more about computers. With the ambition to apply computers to make day-to-day life more satisfying, I became a systems engineer. As a systems integrator, I designed and constructed information processing systems and introduced ERP^(*) packages. A certain customer continued to use a system I designed for more than seven years after delivery. (This system had been designed to accommodate increasingly sophisticated modes of use as users grew increasingly familiar with system, but these features also discouraged further orders, resulting in complaints from the sales department.) A certain project in which I participated could not prevent the customer key person from being relegated to a "poor position." Gradually, I became interested in drafting concepts and proposals for systems that would provide support for



management strategies. In the end, I obtained certification as a small and medium enterprise management consultant. Now, I work as an operational consultant. As a business consultant, I'd like to create new business models for clients, propose innovative IT measures, and help enhance enterprise value. But here in this field, in which improvements and innovations have been sought and realized on factory floors and through QC activities since the days of Taylor, I was unable to find any foundation for such measures. I resolved to set about creating the necessary foundation myself. Based on this resolve, my research theme focuses on RFID tags at factories as a core technology of the fast-evolving IT field. Of course, the ultimate objective remains to ease everyday life through computers.

(*) Enterprise Resource Planning

Report on Educational and Training Programs

In fiscal 2004, NII undertook the following educational and training programs.

<User Training>

NII offered user training courses for NACSIS to provide personnel with experience operating the database, as well as with the contents of the database.

Course Title	Number of Trainees	Number of Applicants	Remarks
NACSIS-CAT Training Course (Books Course)	169	272	5 times at NII facilities
Regional NACSIS-CAT Training Course (Books Course)	213	258	12 times at university libraries
NACSIS-CAT Training Course (Journals Course)	101	204	3 times at NII facilities
NACSIS-ILL Training Course	101	178	3 times at NII facilities
NACSIS-CAT Training Course Concurrently Held with Training for Information Specialists in Japanese Studies:	8	9	Once at NII facilities

Through partnership with university libraries, a total of 600 trainees attended these courses.

<Advanced Training>

The NII administers various educational and training programs designed to give academic research support staff the opportunity to learn specialized advanced technologies

Course Title	Number of Trainees	Number of Applicants	Remarks
Karuizawa Information Processing Seminar	8	22	Once at NII/International Seminar House for Advanced Studies The first half of the session was hosted jointly with the Academic Portal Training Course.
Network Security Training Course (Basic Network Security Course)	60	79	3 times at external sites
Network Security Training Course (Network Manager Course)	43	48	3 times at external sites
Network Administration Training Course	80	113	3 times at external sites
NACSIS-CAT Practical Training Course	21	25	Twice at NII facilities
Academic Portal Training Course	34	123	Once at NII facility
Academic Information Literacy Education Training Course	100	184	Twice at Osaka University facility/NII facility
University Library Staff Training	164	205	Twice at Kyoto University/University of Tokyo facilities

Following last year's sessions, the Academic Portal Training Course and the Academic Information Literacy Education Training Course are to be implemented as regular training courses from the current fiscal year. Expectations are high for both training courses, with the Academic Portal Training Course attracting as many as 123 applicants, 3.6 times the allotted number of 34 trainees, and the Academic Information Literacy Education Training Course attracting 184 applicants for a total of 100 trainee slots across two sessions.

The following operations were also undertaken in partnership with external organizations:

- Support operations involved providing basic materials and granting user numbers for training courses and presentation meetings held by other organizations for various NII services.
- Delivery of SCS (Space Collaboration System) in the Information Security Seminar sponsored by the Ministry of Education, Culture, Sports, Science and Technology (in cooperation with the National Institute of Multimedia Education), including streaming delivery (in place of the information security course held until fiscal 2003)
- Collaboration with the "Training for Information Specialists in Japanese Studies" program sponsored by the Japan Foundation and the National Diet Library.

Detailed information on training programs for fiscal 2005 will be available on the NII Web site for educational and training programs (URL: <http://www.nii.ac.jp/hrd/>). This information will also be provided in the Educational and Training Programs Brief delivered to relevant organizations.

(Planning and Coordination Division)



Academic Portal Training Course



Academic Information Literacy Education Training Course (at Osaka University [co-host])

■ GeNii : Official NII Academic Contents Portal service launched

In April 1, 2005, GeNii launched its official NII Academic Contents Portal service. This service provides separate systems for searching and displaying academic paper information and book information, etc. based on the nature of the contents. It also offers the GeNii Comprehensive Search System, which provides integrated search services covering all contents.

● GeNii Integrated search system [free of charge]

<http://ge.nii.ac.jp/>

● GeNii Components

- CiNii [fees apply in certain cases]

<http://ci.nii.ac.jp/>

This service provides a search function for Japanese academic papers, displaying document citation information (documents cited by a particular document as well as documents citing a particular document) and offering links to full-text documents.

A fee will be charged for detailed bibliographical information, including cited references. Full-text documents may be either free or fee-based, on a case by case basis.

- Webcat Plus [free of charge] <http://webcatplus.nii.ac.jp/>

This service enables searching of books and journals held in university libraries and permits viewing of content and table of contents data for Japanese or English-language volumes. An “associational search function” will provide efficient searching of volumes on relevant themes.

- KAKEN [free of charge] <http://seika.nii.ac.jp/>

This service covers records of topics and overviews of project deliverables for research conducted using Grants-in-Aid for Scientific Research provided by Japan’s Ministry of Education, Culture, Sports, Science and Technology. Relevant data for each topic can be arranged in chronological order, even when they span multiple years.

- NII-DBR [free of charge] <http://dbr.nii.ac.jp/>

Permits searching of specialized databases created and maintained by research groups, either one at a time or all together.

(Contents Division)



■ Intellectual Property Center News

On revisions in regulations on employee inventions within the Organization in accordance with the amendments to Article 35 of the Patent Law (employee inventions)

In the field of intellectual property, compensation for an employee’s invention in the case of the blue light emitting diode has remained major news, attracting public attention since last year due to its strange resolution. The legal resolution led both the inventor and the employer to file lawsuits, with district courts and the high court presenting significantly different mediation proposals. The general public’s reaction appears to be: What is the rationale behind these court decisions?

In cases of employee inventions, Article 35 of the Patent Law stipulates that employment regulations may determine in advance that the right to hold the patent for an invention may be transferred from the employee to the employer (II, Article 35), and that the employee shall be entitled to receive appropriate compensation (III, Article 35). However, in the case of Olympus in 2001, the amount of compensation was set by the courts, not by employment rules. Thereafter, the

law was amended to enforce the principle of private autonomy, to the effect that employment rules, if reasonably concluded between the employer and the employee, may be regarded as the final arbiter for both parties. This amendment was to become effective April 1, 2005. In accordance with the intentions of this amendment, the Organization engaged in discussions between the employer and the faculty on the Web site from December 21, 2004, through February 10, 2005, with two sets of inquiries and responses undertaken during the period. Incorporating the valuable feedback received during the inquiry period and based on the exchange of opinions with external qualified personnel, the final draft of the regulations on employee inventions was posted on the Web site from March. Following official approval, we intend to implement the regulations on April, 1 concurrently with the enforcement of the amended law.

(Intellectual Property Center, Research Organization of Information and Systems)

National Institute of Informatics Public Lectures 2004, “Eight words to deepen Informatics”

The Seventh Lecture: Thursday, January 20, 2005

“Digital Broadcasting” Cosponsored by NHK Science & Technical Research Laboratories



Professor, Information Infrastructure Research Division
National Institute of Informatics

Noboru Sonehara

Project Manager, Content Commerce Project at NTT Cyber Solutions Laboratories from 2000 to 2004.

Professor of cooperative lectures at the Graduate School of Science and Technology, Tokyo Institute of Technology from 2001 to 2004. He received the B.E. degree in electronic engineering and the M.E. degree in engineering from Shinshu University, Nagano in 1976 and 1978, respectively. He then joined NTT and has been engaged in R&D of facsimile communication, weather forecasting, content ID, and content commerce systems. He received the Ph.D. degree in creation, restoration, and evaluation of visual information using neural network based image information processing in 1994.

Research Fields: d-Commerce System Engineering, Media Computing, Digital Rights Expression

Flow of digital information from now on will be “seamless” in which various media such as broadband, broadcast or mobile networks will be used. Contents will thus extend to visual images and multi-media services like music, TV programs, and digital cinema. In these fields, not only technical problems but also legal or economic problems are yet to be settled. Accordingly, in this public lecture, I took

digital broadcasting as a topic, and gave a lecture on the networked society that has been brought about by the IT—namely, digital—revolution. As experts in arts and sciences and citizens of society, let us imagine the future vision of the IT society that we should create together. With this vision in mind, I discussed several topics helpful for our future vision.

The Eighth Lecture: Thursday, February 17, 2005

“Digital Archive”



Professor Emeritus, National Institute of Informatics
Professor, Multimedia Information Research Division
National Institute of Informatics

Takeo Yamamoto

April 2001: Director, Multimedia Information Research Division and Professor, Information Retrieval Research, NII

April 2001: Professor Emeritus, University of Library and Information Science (Tsukuba, Japan)

Oct. 1999-March 2001: Professor, Department of Library and Information Science, University of Library and Information Science

Oct. 1995-Oct. 1999: Vice President, University of Library and Information Science

April 1981-Oct. 1995: Professor, Dept. of Library and Information Science, University of Library and Information Science

Nov. 1972-March 1981: Associate Professor, Computer Centre, University of Tokyo

Sept. 1967-Sept. 1969: Postdoctoral Fellow, Dept. of Chemistry, University of North Carolina at Chapel Hill (U. S. A)

April 1967-Nov. 1972: Assistant, Dept. of Chemistry, University of Tokyo

1. Digital archive in the world

What is a digital archive?

Some of my favorite digital archives are introduced.

2. Why are digital archives needed now?

Rapid increase of materials to be archived, while others are forever lost. Planning for the future is due now.

3. What are the difficulties about digital archives?

Dealing with long-term change needs policy decision, organization and networking.

4. Introducing Toyo Bunko Rare Materials Archive

(Publicity and Dissemination Division)



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