Voice of Students

Let's Set Up "IEICE Iran Section" for More Comprehensive Academic Collaborations between Asian Countries and Iran

Mohammad Rasool Sarrafi Aghdam, PhD candidate at The Graduate University for Advanced Studies (Sokendai), Research Assistant at Sonehara Laboratory, National Institute of Informatics (NII), Tokyo (from Iran)

I am very delighted indeed to have the opportunity to write this article for IEICE Global Plaza. I have received my Bachelor of Engineering with honors in Electronics from Faculty of Engineering at Multimedia University (MMU) in Malaysia, in 2010. The MMU is an international university based on the long year Malaysian national project "Multimedia Super Corridor" and it was established in 1997. The number of students has reached by estimate 20,000 students including 4,000 foreign students from 80 countries. (Note: MMU was introduced by Prof. Swee-Huay Heng, VP/MMU at *http://www.ieice.org/eng/global_plaza/2013/54.html#1*).

When I was in my third year of undergraduate studies in MMU, I was granted the opportunity of one year study based on the 2007-2008 Short Term Exchange Program of JASSO at Fukui University which was the first case of MMU scholars in the university. Through the Program, I could get more familiar with Japanese language and culture more importantly the quality of research and education under Prof. Akio Yamamoto. To enhance myself, I decided to come back to Japan. Just after graduation, I returned to Japan and got a chance to pursue my graduate studies with initiatives of Prof. Kenzo Takahashi. Further, I could get a chance to join France Telecom Orange Labs with kind support of Dr. Yukou Mochida, the former CTO. Currently, I am a PhD candidate at The Graduate University for Advanced Studies (Sokendai) majoring in Information Infrastructure Science and working as a Research Assistant at National Institute of Informatics (NII) under supervisory of Prof. Noboru Sonehara.

Why Sokendai ?

Many general readers may remember Sokendai to be a national university founded in October 1988, as the first independent graduate university without undergraduate courses in Japan. The headquarter of the university is located in the town of Hayama in Kanagawa ⼽ Prefecture. Sokendai offers both three-year and five-year doctoral courses in variety of academic fields ranging from the arts, humanities, culture and social studies to science and engineering. The primary reason why I was interested in Sokendai results in the five-year consistent graduate course.

Further, Sokendai is focused on fostering the first class researchers with outstanding expertise in cooperation with the Inter-University Research Institute Corporation National Institutes for the Humanities under MEXT. The NII is one of the 18 institutions accepting and educating graduate students belonging to the program of Informatics in Sokendai. The annual NII Open House covers the academic collaborations with Sokendai as well and it will help you to understand our research activities (Fig.1).

Research Activities in Sonehara Lab

My main research area at Sonehara Lab. of NII is the privacy preserving data mining and data anonymization techniques. It basically refers to privacy issues in social data sharing. The definition of privacy tends to differently depend on a person. Above all, the privacy issue of personal information has become important as one of the top research fields in recent years due to the vast development of social networks, e-commerce Websites and mobile and smart devices. Also recent advances in the field of data mining have led to increased concerns about personal information privacy, especially in social data sharing. There are a lot of organizations and government agencies that collect and publish micro-data containing personal information of individuals. Therefore, the publishers will remove the personally identifying information such as Social Security Number or Name, to assuage the privacy fear. Even though the personally identifying information is removed from the published dataset, there are so many other public datasets, which would be accessible to anyone, to be used and cross-referenced.

The cross-referencing or linking the datasets is possible due to the existence of some other attributes which can be found in common between the two datasets. Technically this is known as "linking attack" and it brings up some privacy concerns. Moreover there is a tradeoff relationship between the data privacy and data utility. By utilizing anonymization techniques the privacy of individuals is protected to some extent, however the quality of anonymized data is decreased due to the anonymization. My research target is to develop a new anonymization model balancing privacy protection with data utilization which protects the privacy of individuals and at the same time maintains the quality of the anonymized data at the level where the anonymized dataset is useful for different data mining applications, online advertising and marketing, research and education purposes.

The paper presentation in international conferences is very useful in the sense of accellerating the research for better solutions (Fig.2). The relevant IEICE Technical Committees and Conferences have been effective for the promotion of my research activities as well.

Fig.1 With the participants in National Institute of Informatics (NII) Open House

Fig.2 My presentation at CyberSec2013 International Conference held in Malaysia

Proposal of "IEICE Iran Section" and Expectations to the Innovative Academic Activities in the Region

As the number of IEICE overseas members, paper submissions and generally the contribution from all around the world is growing every year, the contribution from Iran has also grown up. According to the current statistics of IEICE published on the Web, IEICE members and paper submissions from Iran have been growing drastically over the past ten years. At the moment, active IEICE members from Iran reached more than two hundreds and the total number of submitted paper from research institutions and universities in Iran has made Iran as one of the top contributor to IEICE among developing countries. However by looking a bit closer, it is clear that there is a big gap between the number of submitted papers and presented papers from Iran at each of IEICE Societies. If the IEICE Iran Section is set up, I believe it will encourage and benefit a lot of researchers in Iran and further Middle East through stronger engagement with IEICE activities and consequently through the opportunity of their research presentation

at IEICE international conferences, workshops and seminars. More importantly, IEICE Iran Section could potentially be considered as the new networking center in Middle East for researchers and scientists.

As an Iranian living in Japan, I always think I should have a role of making the tie between Iran and Japan, further regional countries closer through academic activities in collaboration. I strongly believe IEICE Iran Section should start earlier, on the road of more comprehensive collaboration and multicultural exchange, not only between Iran and Japan, but also between Middle East and Asia Pacific. If you are interested in the expected Section, please contact *rasool@nii.ac.jp* or *global@ieice.org*.
~~~~~~~~~~~~~~~~~~~~~~~~~~

Hot Topics

Evolution of IEICE Electronics Express (ELEX) for Early Publication of World Level Papers

Masayuki Izutsu, Prof., Dr.,
Director, JSPS San Francisco Office,
Editor-in-Chief, ELEX Editorial Committee,
IEICE Electronics Society

The IEICE Electronics Express (ELEX) was commenced in April, 2004, to enhance the quality of member service through the prompt world-level paper publication on the Web, with the full support of IEICE Electronics Society. The time required for the review process was drastically reduced and ELEX has been evolved as the first e-journal in IEICE. Three and a half years have passed since the detailed background of ELEX and scope of action were reported on IEICE Global Plaza. The article is archived on the Web and you can see it at *http://www.ieice.org/eng/global_plaza/2011/24.html*. Hereby, we think it will be beneficial for the general readers who are trying their paper publication in English if the updated situation and issues of ELEX for the future are introduced to you.

Citation
When you click the title of a paper published by ELEX, on the homepage, which you want to browse, the bibliographic information of the paper appears on an electronic journal site operated by Japan Science and Technology Agency (JST), called the "Japan Science and Technology Information Aggregator, Electronic" (J-STAGE). You can see the paper title, author name(s), affiliation of author(s), paper ID, the date of paper submission and the date of publication, keywords, etc. on the page, furthermore, three tags of Abstract, List of Reference Papers and List of Cited Papers. Meanwhile, the third tag doesn't appear when the paper has been without citation. Unfortunately, the number of research papers with the citation tag is few at the moment.

Downloading
The paper can be acquired by downloading in pdf format. The frequency of acquisition of each paper is not personally published, but the secretariat of ELEX can get the information so that the top page of ELEX displays the top 10 papers with more acquisition every month. We think it will be much better if every bibliographic page is equipped with a download counter. It is possible to share the bibliographic information through SNS covering Twitter or Facebook in ELEX. The monthly frequency of access to ELEX depends on the month with variance, roughly speaking, it is around twenty thousands, the monthly number of acquisition is around ten thousands. Since the number of published papers is about two thousands, it means that a paper on ELEX is downloaded 6 times a month in average, while the acquisition of new papers might be more frequent.

Linkage
Since the J-STAGE is linked with sites of academic information covering search engines represented by Google, and INSPEC, when a paper is searched with the keywords or author names on the Web, a corresponding paper published on ELEX is hit. More than half of hit papers have been downloaded so far. Those papers are quoted as the references in reading papers, transferring or discussing the information to colleagues via SNS, or writing papers. All of ELEX papers are assigned the digital object identifier (DOI), the paper referred in the other publications can be counted in citation.

Open Access

ELEX is operated in an open access environment. Therefore, any information generator must pay for the publication on the Web, and any paper published on ELEX can be acquired without charge, as long as the information is delivered by IEICE member(s). Thus, any member of IEICE Electronics Society can publish papers freely and widely on the Web. The open access of academic papers moves with the times as well as general software or administrative data. Even academic institutions or publishers in Western countries who have tried the information enclosure gradually adopt the open access though it tends to require considerable investment.

Advance Publication
ELEX has introduced the scheme of advance publication since April 2013, so that the number of days required from a paper submission to the publication has been reduced by 20 days, to be about one month. Since every ELEX paper is written according to a specified format, it is possible to publish it on the Web as the advance publication before editorial works once the publication is accepted by the Editorial Committee of ELEX. It is inhibited to change the content of the advance publication in the editorial work, while a data link from the final publication to the advance publication still remains also after the final publication was published. The ELEX secretariat reserves both publications so that they can manage any issue due to the difference between these publications.

Cost Performance
The publication charge covering new taxation is about Yen 41,000 for MS word based manuscript up to 6 pages (for LaTex, about Yen 31,000), about Yen 103,000 up to 12 pages (for LaTex, about Yen 82,000). The time required from paper reception to decision of publication or rejection is only around 20 days, the time required to the advance publication is about one month. In comparison with the other publications over the world, ELEX has achieved the excellent cost performance. This is due to the specified procedure of publication and use of J-STAGE as an open publication system.

Statistics
Fig.3 shows the trend of submitted papers and published papers. Table 1 shows the top 15 states in paper submission. The special fields of submitted or published papers are integrated circuits (about 48%), electronic circuits (about 18%) and microwave (about 18%).
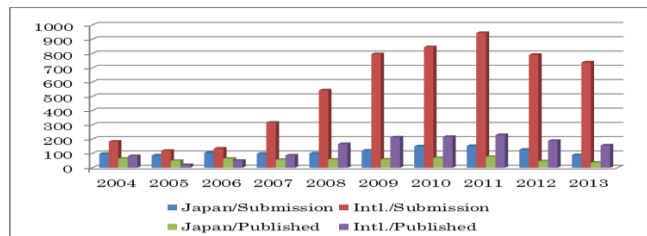

Fig.3 The number of ELEX paper submissions and publications

Table 1 The top 15 states in ELEX paper submission / publication

State	Submitted	Accepted	Rate(%)
Korea	1334	424	32
Iran	1064	249	23
Japan	1037	542	52
China	754	198	26
Malaysia	574	121	21
Taiwan	239	70	29
India	119	23	19
USA	92	37	40
Mexico	92	22	24
Spain	43	14	33
Turkey	43	8	19
Czech	34	7	21
Singapore	33	15	45
Pakistan	32	8	25
Canada	31	11	35

Further Issues
We would like to live up to the expectations of researchers over the world who are trying to publish their papers through ELEX. The main issue to be discussed for the future of ELEX is the enhancement of citation. In principle, this depends on the references listed in each paper. ELEX has specified the minimum number of references to be 10. It is important to read preceding papers in great respects and refer to them in paper publication, in the globalizing world.
~~~~~~

Message from TFIPP Secretariat
This issue is delivered also by a free mail magazine "IEICE Global Plaza Online" with updated news of interest for you. Please contact Prof. Takahashi, TFIPP (Task Force for International Policy

and Planning) at *global@ieice.org*, if you need. Back numbers are available in archives at:
http://www.ieice.org/eng/global_plaza/index.html/