15th March 2015

Professor Prof. László Zentai
Secretary-General & Treasurer
International Cartographic Association

Takashi MORITA
Chair of the National Committee for Cartography,
Science Council of JAPAN

Dear Professor László Zentai,

I am very pleased to inform you that the National Committee for Cartography, Science Council of Japan, proposes the item below to the ICA:

**ICA Vice-President (2015-2019)**
Professor Masatoshi Arikawa (University of Tokyo)  => cf. attached CV and letter of intent

Sincerely yours,

Takashi Morita
Letter of intent for candidate of the Vice-President of ICA  (Masatoshi Arikawa)

I am a professor of Center for Spatial Information Science (CSIS) of the University of Tokyo. I am also the director of the division of Joint-Use and Research, which is responsible for leading and supporting the research community of Geographic Information Science and Technology in Japan. CSIS is providing the academic spatial data infrastructure, including governmental and commercial spatial data and big data of people’s movement, to the universities that have special contracts with related organizations for only research uses. I am the chair of the board of directors of Japan Cartographers Association (JCA). JCA was established in 1962, and has been the National Member of ICA for more than 50 years. Japan was one of the founding members and has contributed to almost every activity of ICA, including national reports, international cartographic exhibition and the Barbara Petchenik Children’s Map Competition. I am now the chair of the Commission of Ubiquitous Mapping, and have organized several workshops and symposiums to discuss and reveal the essence of Cartography for the age of ubiquitous computing from the viewpoint of Semiotics and GI Science and Technology.

I received Ph.D. from Computer Science from Kyushu University, Japan in 1992. My dissertation, titled “View Functions for Geographic Databases”, has proposed, developed and evaluated a software architecture and its related algorithms for integrating the three concepts, those are, views defined by queries to databases, views in MVC (Model-View-Controller) architecture for GUI (Graphic User Interfaces), and computer generalization for visualizing geographic databases depending on the scale of mapping. I met the book titled “Elements of Cartography” in late 1980 when I was researching on computer generalization. The book strongly influenced and led me to Cartography from Computer Science. My current research interests include human-centered design for location-based services, generalization for interactive three-dimensional geovisualization and geographic natural language processing for real-time risk management.

If I am chosen as a vice-president of ICA, I will contribute mainly in the following points.

(1) Redefinition of Cartography for ubiquitous computing environments

The current mobile mapping is convenient and generated automatically by computers with less effort from cartographers. It results in only a tool for retrieving
and visualizing geospatial information as part of search engines. Mapping can be served in more rich and diverse ways as human-created content connecting to digital media, such as newspapers, TV programs and social media. I want to resolve the redefinition of Cartography for the modern ubiquitous IT society for more people in new fields to understand the core concept and significance of Cartography for producing better maps and mapping.

(2) Inviting ICC to Japan in 2019

The year 2019 marks the 150th Anniversary of the very first national land survey in Japan conducted in 1869. Going back 50 years from it, Tadataka Inō, a Japanese surveyor and cartographer, completed the first map of Japan, using modern surveying techniques, which had already applied the idea of longitude and latitude. For many years since then, the maps and land surveys developed in Japan were all based on the Inō maps, known for its high precision and quality. The year 2018 is the 200th Anniversary of Inō’s death. The Japan Local Bid Committee is highly motivated to celebrate the two memorable years with our fellow members of the International Cartographic Association (ICA). I am the vice-chair of the bid committee of Japan.

Tokyo was selected as the site for the 2020 Olympic and Paralympic Games, and is now seeing a rapid advancement in the City’s infrastructure. In welcoming the increasing number of international visitors, maps and signage in multiple languages are common all over Tokyo and are being improved further. ICC 2019 will be a great opportunity for cartographers to see and test the usability of the printed maps and original mobile applications prepared for the Olympic and Paralympic Games. ICC delegates are invited to give their feedback on their feasibility during the Conference.

(3) Contribution to the core activity of ICA

Maps and mapping are significant in many fields, but low level of knowledge and technology of Cartography has led less use of maps and resulted in inappropriate decisions made in many fields. Cartography should be considered as a core interdisciplinary like Statistics. Particularly, Cartography is important in Japan, a nation challenged by frequent natural disasters such as tsunamis and typhoons. We have high-level knowledge and technology in creating maps for disaster management. Cartography is not only used for rescue actions but also applied for disaster prevention and prediction. In addition, the human-centered design of location-based services should be done using the knowledge and technology of Cartography. It is a great honor for me to contribute to all activities of ICA and the
outreach activities of Cartography.

Masatoshi Arikawa
Chair of Commission of Ubiquitous Mapping, of Int ’t Cartographic Association (ICA)
Chair of the board of directors of Japan Cartographers Association (JCA)
Professor and Director of the division of Joint -Use and Research,
Center for Spatial Information Science,
The University of Tokyo
5·1·5, Kashiwanoha, Kashiwa City,
Chiba 277-8568, Japan
TEL.+81-04-7136-4291
FAX. +81-7136-4292
Email. arikawa@csis.u-tokyo.ac.jp
CV

Masatoshi ARIKAWA

He is a professor of the Center for Spatial Information Science (CSIS) at the University of Tokyo. His research interests include cartography, spatial information technology, databases, virtual reality and user interfaces. He received the Ph.D. degrees in computer science and communication engineering from Kyushu University, Fukuoka, Japan, in 1992. He researches on developing new spatial communication tools to enhance spatial ability of people. He is now the chair of commission of Ubiquitous Mapping, International Cartographic Association, and the chair of the board of directors of Japan Cartographers Association (JCA). He was also the editor in chief of Journal of Geographic Information System Association from 2002 to 2004, and a vice chair of Special Interest Group of Data Engineering, the Institute of Electronics, Information and Communication Engineers (IEICE) from 2000 to 2003. He is also a member of CaGIS, IEEE, ACM, GISA (GIS Association), IPSJ(Information Processing Society of Japan), and VRSJ (Virtual Reality Society of Japan). He is a committee member of Japan’s committee of ISO/TC211. His center is a university member of OGC and he is a representative of it. His email address is arikawa@csis.u-tokyo.ac.jp.
Name in Full: Masatoshi ARIKAWA
Born: September 8th, 1962 in Fukuoka Prefecture, Japan
Age: 52
Citizenship: Japanese
Languages: Japanese, English
Marital status: Married
Residence: Tokyo, Japan
Occupation:
Professor and Director of the Division of Joint Use and Research,
Center for Spatial Information Science (CSIS), The University of Tokyo
Address of My Office: 5-1-5, Kashiwanoha, Kashiwa City, Chiba 277-8568, Japan
Tel: +81-4-7136-4291
Fax: +81-4-7136-4292
E-mail: arikawa@csis.u-tokyo.ac.jp

[Degrees]
1992 Ph. D. in Computer Science and Communication Engineering
from Kyushu University
"Studies on View Functions for Geographic Databases"
1988 Master of Engineering in Computer Science and Communication Engineering
from Kyushu University
1986 Bachelor of Engineering in Computer Science and Communication Engineering
from Kyushu University

[Awards]
IPSJ (Information Processing Society of Japan) Convention Award, 1988
Award, Division of Education, GIS Association, 2006
Award, Division of Software, GIS Association, 2006
Cyber Japan Award, Division of PC, Geospatial Information Authority of Japan, 2013

[Work experience]
2010- PROFESSOR
Center for Spatial Information Science, University of Tokyo, Tokyo, Japan
- Study on Spatial Information Science and Technology, Databases, Internet Applications,

1999-2010 ASSOCIATE PROFESSOR
Center for Spatial Information Science, University of Tokyo, Tokyo, Japan  
- Study on Spatial Information Science and Technology, Databases, Internet Applications,  
  Computer Cartography, Mobile Computing, and Media Art.

1994-99 ASSOCIATE PROFESSOR  
Department of Intelligent Systems, Hiroshima City University, Hiroshima, Japan  
- Conducted researches in interactive 3d graphics, cscw, high-speed  
  computer networks, databases systems, geographic information systems,  
  object-oriented programming, query languages, visual user interfaces,  
  and map generation.  
- Taught Compiler, PC Hardware Programming, Data Structures & Algorithms,  
  Database Systems, 3D Computer Graphics to about 60 to 180 undergraduate students.

1996, Feb-Mar VISITING SCHOLAR  
The National Center for Geographic Information and Analysis (NCGIA),  
Department of Geography,  
University of California, Santa Barbara (UCSB), California, USA  
- Work on dynamically changeable visual interfaces and to understand  
  more about the human cognitive model for them.

1993-94 RESEARCH ASSOCIATE  
Department of Information Science, Kyoto University, Kyoto, Japan  
- Conducted researches in databases systems, geographic information  
  systems, object-oriented programming, object-oriented data models,  
  query languages, visual user interfaces, and map generation.  
- Led seminars on database systems, algorithms, object-oriented  
  programming, computer graphics, computational geometry, graphical  
  user interface and cartography to senior students and graduate  
  students of Dept. of Information Science in Kyoto University.

1989-93 RESEARCH ASSOCIATE  
Department of Computer Science and Communication Engineering  
Kyushu University, Fukuoka, Japan  
- Conducted researches in databases systems, geographic information  
  systems, object-oriented programming, object-oriented data models,  
  query languages, visual user interfaces, and map generation.  
- Led exercises on making a 8-bits CPU by 74 series TTL-IC's, and
concurrent programming on UNIX Operating Systems to undergraduate students of Dept. of Computer Science and Communication Engineering in Kyushu University.
- Led seminars on database systems, algorithms, object-oriented programming, computer graphics, computational geometry, graphical user interface and cartography to senior students and graduate students of Dept. of Computer Science and Communication Engineering in Kyushu University.

1988-89 RESEARCH ASSOCIATE
Kyushu University Computer Center
Kyushu University, Fukuoka, Japan
- Conducted researches in databases systems, scientific visualization, geographic information systems, object-oriented data models, query languages.
- Led a tutorial on information retrieval systems and scientific databases available in Kyushu University Computer Center for users of various faculties in Kyushu University.
- Led seminars on scientific visualizations and statistical analysis packages for technical staffs of Kyushu University Computer Center.
- Edited monthly books to inform users information concerning Kyushu University Computer Center.

1987-88 TEACHER
The Course of Information Processing (a college)
School Service of Business, Fukuoka, Japan
- Taught BASIC Programming and system design to about 40 students.

1987-88 TEACHING ASSISTANT
Department of Computer Science and Communication Engineering
Kyushu University, Fukuoka, Japan
- Taught 3rd year students of Dept. of Computer Science and Communication Engineering in Kyushu University how to use a CAD software for designing and testing logic circuits.

1984 TRAINEE AND PROGRAMMER
Hitachi Software Co., Yokohama, Japan
- Designed and implemented an editor for drawing in Hitachi Software Co.,
  when I was a 3rd year undergraduate student in Kyushu University.

[Society Activity]
1. PC Chair, International Symposium on Cartography in Internet and Ubiquitous Environments,
   Sponsored by ICA and Center for Spatial Information Science, the University of Tokyo, March
   17-19, 2015.
2. Vice-Chair, ICC Bid Committee, Japan, 2015
3. Chair, Commission of Ubiquitous Mapping, International Cartographic Association (ICA),
   2011-2015
4. Member, National Committee for Cartography, Science Council of Japan, 2012-2016
5. Chair, the board of directors of Japan Cartographers Association (JCA), 2013-2017
6. Member, the board of directors of Japan Cartographers Association (JCA), 2009-2013
7. Member, the board of trustees of Japan Cartographers Association (JCA), 2005-2009
8. Member, Committee of reviewing digital national base maps, The Geospatial Information
   Authority of Japan (GSI), 2013-2014.
9. Member, Committee of reviewing metadata for geospatial information, The Geospatial Information
   Authority of Japan (GSI), 2012-2013.
10. Chair, Committee of reviewing the internal standard of geographic identifiers, The Geospatial
    Information Authority of Japan (GSI), 2010-2011.
11. PC Member, W2GIS, 2003-
12. PC Member, ICT-EurAsia conference, 2011-
13. PC Member, ER 2012
14. PC Member, the International Symposium on Spatial Data Handling 2012
16. Workshop Chair, The 18th International Conference on Geoinformatics 2010, Peking University,
    June 18th-20th, 2010, Beijing, China
17. PC Member, Joint International Conference on Theory, Data Handling and Modelling in
    GeoSpatial Information Science, Hong Kong, The Hong Kong Polytechnic University, 26-28
    May, 2010.
18. PC Member, 2009 International Workshop on Theory and Applications Frontier of Location Based
    Services, 4 to 6 June, 2009 in Qindao China, published by IEEE CS (Indexed by EI).
19. PC Member, DASFAA (The International Conference on Database Systems for Advanced
    Applications), 2005-2008
22. Vice-Chair, Editorial Committee, GIS Association, 2002-2004
23. Member, Editorial Committee, GIS Association, 2000-2002
24. Member, Editorial Committee, DBSJ(DataBase Society of Japan), 2005-2011

[Major papers written in English]
2. Yasushi Inoue, Ken'ichi Tsuruoka and Masatoshi Arikawa, Spatio-temporal story mapping animation based on structured causal relationships of historical events, ISPRS TC IV Symposium on Geospatial Databases and Location Based Services, 14-16 May 2014, Suzhou. (USB Proceedings)
3. Ruochen Si, Min Lu, Masatoshi Arikawa, Yasushi Asami and Junko Iwasaki, Finding good areas for renting apartments using apartments information and users’ trajectories. ISPRS TC IV Symposium on Geospatial Databases and Location Based Services, 14-16 May 2014, Suzhou. (USB Proceedings).
10. Lu Min and Masatoshi Arikawa, Map-based Storytelling Tool for Real-World Walking Tour, 9th International Symposium on Location-Based Services, which will take place in Munich, Germany,


[Books]