## VITAE

# Munenari INOGUCHI

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# **General Background**

## **EDUCATION**

Ph.D. Graduate School of Informatics, Kyoto University, Kyoto, Japan April 2005-March 2008.

Obtained Ph.D. of Informatics in 2008.

Thesis: Standardization of Information Processing for Effective Disaster Response - Realizing Holistic Support for Victims' Life Recovery based on Victims' Master Database

M.A. Graduate School of Informatics, Kyoto University, Kyoto, Japan April 2003-March 2005.

Obtained Master of Informatics in 2005.

Thesis: Development of Information Processing Framework for Effective Emergency Response

B.A. Department of Engineering, Kyoto University, Kyoto, Japan April 1999-March 2003.

Obtained Bachelor of Engineering (Civil Engineering) in 2003.

Thesis: Development of an Electrical Supporting System for Improvements of Disaster Preparedness of Japanese Society

### **EMPLOYMENT**

4/18 to present: Associate Professor, Faculty of Sustainable Design, University of Toyama

12/15 to 3/18: Lecturer, Faculty of Informatics, Shizuoka University

8/11 to 11/15: Assistant Professor, Research Institute for Natural Hazard and Disaster

Recovery, Niigata University

4/11 to 7/11: Specially Appointed Assistant Professor, Research Institute for Natural

Hazard and Disaster Recovery, Niigata University

4/08 to 3/11: Specially Appointed Assistant Professor, Research Center for Natural

Hazard and Disaster Recovery, Niigata University

## **OVERSEAS RESEARCH EXPERIENCE**

## United States of America

1. July, 2006 – February, 2007. Belonged to Environmental Systems Research Institute, Inc. Redlands, California, and developed resource estimation software related with the damage assessment system (HAZUS) in U.S.A, using geographic information system. This was supported by international internship program by Disaster Prevention Research Institute, Kyoto University.

### LANGUAGE ABILITY

Japanese (native)

English (fluent)

## FIELDS OF INTERESTS

Disaster Management

Risk Management

Disaster Information Management System

Victims Life Reconstruction

Victims Master Database System

Information and Communication Technology

Geographic Information System

Software Engineering

# **Research Activities**

### PEER-REVIEWED JOURNAL ARTICLES

- 1. Reo Kimura, Keiko Tamura, Munenari Inoguchi, Haruo Hayashi and Shigeo Tatsuki, (Nov. 2015): Current Situation and Problems of the Victims in the Life Recovery Process of More Than Ten Years The Survey on Socio-Economic Recovery of Sixteen Years after the Great Hanshin-Awaji (Kobe) Earthquake Disaster -, Institute of Social Safety Science, Journal of Social Safety Science, No.27, pp.35-45.
- **2.** Haruo Hayashi and Munenari Inoguchi, (Aug. 2015): What Should Be Considered to Realize ICT Support for Effective Disaster Response and Recovery?", The Institute of Electronics, Information and Communication Engineers, IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer Sciences, Vol.E98-A, No.08, pp.1594-1601. (Invited Paper)
- **3.** Munenari INOGUCHI, Keiko TAMURA, Haruo HAYASHI (Aug. 2015): Development of "WBS Manager" to Design Disaster Response Plan, The Institute of Electronics, Information and Communication Engineers, IEICE TRANSACTIONS on Fundamentals of Electronics, Communications and Computer Sciences, Vol.E98-A, No.08, pp.1674-1675.
- **4.** KIMURA, R., INOGUCHI, M., TAMURA, K., and HAYASHI, H.(Apr. 2015): "Comparison Between the Life Recovery Processes after the Mid-Niigata Earthquake and the Chuetsu-Oki Earthquake Results of a Random Sampled Social Survey Using the Life Recovery Calendar and GIS-Based Spatiotemporal Analysis", Journal of Disaster Research, Vol.10, No.2, pp.196-203.
- **5.** Keiko Tamura, Munenari Inoguchi, Ryota Hamamoto, Shinji Kikuchi, Haruo Hayashi (Nov. 2014): Identifying the Requirements Definition of Work Process Structure for Supporting Victims' Life Reconstruction -Analysis of 7 municipals' Data Stored in the Iwate Victims' Disaster Master Database-, Institute of Social Safety Science, Journal of Social Safety Science, No.22, pp.67-77.
- **6.** Munenari INOGUCHI, Keiko TAMURA, Kei HORIE, Haruo HAYASHI (Nov. 2014): Implementation of Web-based System for Building Damage Assessment on Online Network Case studies of Typhoon MAN-YI (1318) and Typhoon WIPHA (1326) in Japan -, 2014 IEEE Asia Pacific Conference on Circuits and Systems, pp.395-398.
- **7.** Munenari Inoguchi, Keiko Tamura, Satomi Sudo, and Haruo Hayashi (Mar. 2014): Implementation of Prototype Mobile Application Operated on Smartphones for Micromedia Service, Journal of Disaster Research, Vol.9, No.2, pp.139-148.
- **8.** KIMURA, R., INOGUCHI, M., TAMURA, K., NAWA, Y. and HAYASHI, H. (Dec. 2013): "Implementation and Operation of a Cloud-Based Participatory Damage Recognition System to Obtain a Common Operational Picture that Supports a Quick Disaster Response", International Journal for Infonomics (IJI), Special Issue Volume 1, Issue 1, pp.834-840.

- 9. Hiroyoshi Tanji, Atsuyuki Morishima, Munenari Inoguchi, Hiroyuki Kitagawa (Oct. 2013):
- **10.** An Attempt to Develop Crowdsourcing Techniques for Identifying Tornado's Paths Based on Web Data, Information Processing Society of Japan, Journal of IPSJ, Vol.6, No.5, pp.95-106.
- **11.** Akira Okamoto, Shinjiro Ikezoe, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi (Jul. 2013): Development of Business Continuity Plan for Effective Expressway Operation by Applying both CPM and BFD -A Case Study on West Nippon Express Co, Ltd.-, Institute of Social Safety Science, Journal of Social Safety Science, No.20, pp.1-12.
- **12.** INOGUCHI, M., KIMURA, R., TAMURA, K. and HAYASHI, H. (Nov. 2012): "Proposing Effective Method to Develop Common Operational Picture in Disaster Response Utilizing Cloud-based Geospatial Infrastructure", International Journal for Infonomics (IJI), Volume 5, Issue 4, pp.663-668.
- **13.** Munenari Inoguchi, Keiko Tamura, Reo Kimura, Akiko Obara, Haruo Hayashi (Nov. 2012): Implementation of Web-based Victims Master Database Management System for Effective Life Reconstruction at Wide-spread Disaster -Challenge of Iwate Prefecture at the 2011 Greate East Japan Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.18, pp.351-361.
- **14.** Keiko Tamura, Munenari Inoguchi, Shingo Suzuki, Akira Okamoto, Tomohiko Ozaki, Reo Kimura, Haruo Hayashi (Nov. 2012): Developing 'Business Impact Map' for Realizing the Feasibility Assessment of Disaster Response Manual with Stakeholders Involvement -A Case Study of Business Continuity Plan in Nippon Expressway Company Limited, Wakayama Branch-, Institute of Social Safety Science, Journal of Social Safety Science, No.18, pp.289-299.
- **15.** Takashi Furuya, Reo Kimura, Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Nov. 2012): Utilization of Geispatial Information by the Emergency Mapping Team to Assist in Disaster Responsive Works; A Case Study of Medical, Health and Welfare Activities Practiced during the Recovery Period at Iwate Prefecture in the 2011 Pacific Coast Tohoku Earthquake, Institute of Social Safety Science, Journal of Social Safety Science, No.18, pp.363-372.
- **16.** Reo Kimura, Keiko Tamura, Munenari Inoguchi, Kei Horie, Haruo Hayashi (Nov. 2012): Method of Designing Training Programs for Disaster Responders Based on Instructional Design (ID) Theory in the Case of Life Reconstruction Support for Disaster Victims of Tokyo Metropolitan Government, Institute of Social Safety Science, Journal of Social Safety Science, No.18, pp.433-442.
- **17.** Akira Okamoto, Hiroshi Someya, Shinjiro Ikezoe, Hideki Kaji, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi (Nov. 2012): Systematization of Various Disaster Countermeasures and Classification of Risks on Expressways, A Case Study on West Nippon Express Co, Ltd., Institute of Social Safety Science, Journal of Social Safety Science, No.18, pp.323-332.

- **18.** Munenari Inoguchi, Keiko Tamura, Reo Kimura, Takashi Furuya, Haruo Hayashi (Sep. 2012): Structure of Web-Based Victims Master Database of the Life Rebuilding Process -A Study of the Great East Japan Earthquake of 2011-, 15th World Conference on Earthquake Engineering Proceedings, CD-ROM(8pp.).
- **19.** Keiko Tamura, Munenari Inoguchi, Reo Kimura, Takashi Furuya, Haruo Hayashi (Sep. 2012): Supporting Life Recovery Process with the Management System Based on the Victims Master Database A study of Crisis Management Following Tokyo Metropolitan Near Field Earthquake Disaster-, 15th World Conference on Earthquake Engineering Proceedings, CD-ROM(8pp.).
- **20.** Reo Kimura, Munenari Inoguchi, Keiko Tamura, Takashi Furuya, Haruo Hayashi (Sep. 2012): A Methodology for the Standardization of Information Processing following the Great East Japan Earthquake of 2011, 15th World Conference on Earthquake Engineering Proceedings, CD-ROM(8pp.).
- **21.** Takashi Furuya, Reo Kimura, Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Sep. 2012): Geospatial Information Improves the Decision-Making Process during the Disaster Response: The Experience of the Emergency Mapping Team in the 2011 off the Pacific Coast of Tohoku Earthquake, 15th World Conference on Earthquake Engineering Proceedings, CD-ROM(8pp.).
- **22.** Munenari Inoguchi, Haruo Hayashi (Jun. 2012): Visualization Methods and Associated Challenges of Disaster Data for Common Operational Picture A Case Study of the 2011 Great East Japan Earthquake based on the Activities of Emergency Mapping Team of the Cabinet Office —, Journal of i-society 2012, CD-ROM(5pp.).
- **23.** Reo Kimura, Munenari Inoguchi, Keiko Tamura, Yuji Nawa, Haruo Hayashi (Jun. 2012): Implementation of a Web-Based and Cloud-Based Participatory GIS System to Certify Property Damage due to Tsunami, Journal of i-society 2012, CD-ROM(5pp.).
- **24.** Munenari Inoguchi, Takashi Furuya, Reo Kimura, Keiko Tamura, Haruo Hayashi (May. 2012): How to Construct the Common Operational Pictures with Dynamic Maps Using the Mashup Technology EMT at National and Municipal Level in 2011 Great East Japan Earthquake, Proceedings of TIEMS (The International Emergency Management Society) Japan Chapter, pp.8.
- **25.** Reo Kimura, Munenari Inoguchi, Keiko Tamura, Takashi Furuya, Haruo Hayashi (May. 2012): Clarifying the Function of the Emergency Mapping Team in order to Allocate the Limited Resources in the Time of 2011 Great East Japan Earthquake, Proceedings of TIEMS (The International Emergency Management Society) Japan Chapter, pp.7.
- **26.** Keiko Tamura, Munenari Inoguchi, Reo Kimura, Takashi Furuya, Haruo Hayashi (May. 2012): Building a Victims Master Database Using the GeoWrap Method without a Primary Key, Proceedings of TIEMS (The International Emergency Management Society) Japan Chapter, pp.7.

- **27.** Takashi Furuya, Reo Kimura, Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Mar. 2012): Clarifying Visualization Skills for Common Operational Picture to Realize Effective Disaster Response -A Case Study of 2011 East Japan Earthquake-, Japan Society for Disaster Information Studies, Journal of Disaster Information, No.10, pp.68-76.
- **28.** Takashi Furuya, Munenari Inoguchi, Go Urakawa, and Haruo Hayashi (Feb. 2012): A Basic Study of Open Space Information as Social Infrastructure for Wide-Range Cooperation in Large-Scale Seismic Disaster, Journal of Disaster Research, Vol.7, No.2, pp.190-202, 2012.2.
- **29.** Munenari Inoguchi, Keiko Tamura, Takashi Furuya, Reo Kimura, Haruo Hayashi (Nov. 2011): Proposal of Effective On-Demand MashUp among Spatial Information from the activity of Emergency Mapping Team -A Case Study of the 2011 off the Pacific Coast of Tohoku Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.15, pp.219-229.
- **30.** Reo Kimura, Takashi Furuya, Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Nov. 2011): Clasifying the Characteristics of Data Set and Data Sharing about Damage and Disaster Responses in Government in Widespread Gigantic Disaster -A Case Study of the Data of Evacuees in Evacuation Shelters in the 2011 off the Pacific Coast of Tohoku Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.15, pp.233-242.
- **31.** Akira Okamoto, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi, Hiroshi Someya, Yuko Nanbu (Nov. 2011): Development of Business Continuity Plan for Efficient Expressway Operation for Various Risks -A Case Study on West Nippon Expressway Co, Ltd.-, Institute of Social Safety Science, Journal of Social Safety Science, No.15, pp.223-232.
- **32.** URAKAWA, G., HAYASHI, H., TAMURA, K., INOGUCHI, M., HORIE, K., HIGASHIDA, M., HAMAMOTO, R. (Dec. 2010): Building Comprehensive Disaster Victim Support System, Journal of Disaster Research, Vol.5, No.6, pp.687-696.
- **33.** Munenari Inoguchi, Keiko Tamura, Reo Kimura, Haruo Hayashi (Nov. 2011):Development of Practical Disaster Response Manual based on the Framework of Project Management -A Case Study of Emergency Shelter Management Plan of Shibata City, Niigata-, Japan Society of Civil Engineers, Journal of Safety Problem Research, Vol.5, pp.229-234.
- **34.** Munenari Inoguchi, Keiko Tamura, Reo Kimura, Haruo Hayashi (Nov. 2010): Cross-border Activities over City Departments toward Realizing Common Operational Picture to Improve Disaster Response for Local Government, Japan Association for Earthquake Engineering, Proceedings of 13th JAEE Conference, pp.636-643.
- **35.** Reo Kimura, Keiko Tamura, Munenari Inoguchi, Haruo Hayashi (Nov. 2010): INFLUENCE OF EARTHQUAKE DISASTER EXPERIENCE ON RISK PERCEPTION AND DAMAGE ESTIMATION, Japan Association for Earthquake Engineering, Proceedings of 13th JAEE Conference, pp.4141-4148.

- **36.** Keiko Tamura, Reo Kimura, Munenari Inoguchi, Haruo Hayashi (Nov. 2010): ANALYZING THE SUBJECTIVE EVALUATION OF GOVERNMENTAL ASSISTANCE UNDER THE IMPACT OF SEISMIC DISASTER, Japan Association for Earthquake Engineering, Proceedings of 13th JAEE Conference, pp.4149-4156.
- **37.** Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Nov. 2010): Administrative Workload Analysis of Supporting Victims Life Recovery based on Victim Master Database -A Case Study of Kashiwazaki City at 2007 Niigataken Chuetsu-oki Eathquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.13, pp.453-462.
- **38.** Reo Kimura, Keiko Tamura, Munenari Inoguchi, Haruo Hayashi, Yasuyuki Urata (Nov. 2010): Generalization of Victims' Behavior and Life Reconstruction Processes -Socio-economic Recovery from Three Earthquake Disasters Occurred in Hyogo Prefecture in 1995, Niigata Prefecture in 2004 and 2007-, Institute of Social Safety Science, Journal of Social Safety Science, No.13, pp.175-185.
- **39.** Takashi Furuya, Haruo Hayashi, Go Urakawa, Munenari Inoguchi (Nov. 2010): A Basic Study of Open Space Information as Social Infrastructure for Wide-range Cooperation in Large-scale Seismic Disaster, Institute of Social Safety Science, Journal of Social Safety Science, No.13, pp.293-303.
- **40.** Satoshi Kitada, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi, Yutaka Motoya (Nov. 2010):
- **41.** Analyzing the Emergency Call that is Caused by Heavy Rainfall and Investigation of Relationship to the Sediment Disaster Warning -Learned in Hofu City at the Chugoku, North Kyushu Heavy Rainfall in 2009-, Institute of Social Safety Science, Journal of Social Safety Science, No.13, pp.283-292.
- **42.** INOGUCHI, M., TAMURA, T., HAYASHI, H. (Jun. 2010): VISUALIZATION OF VICTIMS STATUS IN LIFE RECOVERY PROCESS USING GIS, Proceedings of the International Emergency Management Society (TIEMS) 17th Annual Conference, pp.327-338.
- **43.** Munenari Inoguchi, Keiko Tamura, Haruo Hayashi (Mar. 2010): Administrative Workload Analysis of Supporting Victims Life Recovery based on Victim Master Database -A Case Study of Kashiwazaki City at 2007 Niigataken Chuetsu-oki Eathquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.12, pp.81-91.
- **44.** Takashi Furuya, Munenari Inoguchi, Keiko Tamura, Go Urakawa, Haruo Hayashi (Mar. 2010): Ex-post Analysis for Location/Allocation of Temporary Housing Unit and Demand after the Niigata Chuetsu-oki Earthquake, Institute of Social Safety Science, Journal of Social Safety Science, No.12, pp.41-51.
- **45.** INOGUCHI, M., TAMURA, T., HAYASHI, H. (Feb. 2010): Realization of Effective Disaster Victim Support by Development of Victims Master Database with geo-reference -A case study of 2007 Niigataken Chuetsu-oki Earthquake-, Journal of Disaster Research, Vol.5, No.1., pp.12-21.

- **46.** URA, Y., INOGUCHI, M., HAYASHI, H. (Feb. 2010): Realization of Local Capacity Building for Managing Instructional-System-Design-Based GIS A Case Study of Wajima City at 2007 Noto Hanto Earthquake -, Journal of Disaster Research, Vol.5, No.1., pp.22-30.
- **47.**HONMA, T., URAKAWA, G., INOGUCHI, M., TONOSAKI, N., HAYASHI, H. (Feb. 2010): Building Service Oriented GIS System for Local Government -Through the Experience of Chuetsuoki Earthquake, 2007-, Journal of Disaster Research, Vol.5, No.1, pp.98-107.
- **48.** YOSHITOMI, N., HAYASHI, H., MATSUOKA, K., TERANO, H., INOGUCHI, M., URAKAWA, G. (Feb. 2010): The Development of Disaster Victims Database Utilizing the GeoWrap Method -From the 2004 Niigata Chuetsu Earthquake to the 2007 Niigataken Chuetsu-oki Earthquake, Journal of Disaster Research, Vol.5, No.1, pp.74-81.
- **49.** INOGUCHI, M., TAMURA, T., HAYASHI, H. (Jan. 2010): Realization of Effective Disaster Victim Support through Information Integration and Visualization Using GIS, Third International Conference on Health Informatics, Proceedings, pp.381-387.
- **50.** Keiko Tamura, Fumi Okada, Reo Kimura, Munenari Inoguchi, Shigeo Tatsuki, Haruo Hayashi (Nov. 2009): Clarifying the Situation of the Victims with Special needs on Evacuation Site Using the 7 Livelifood Domain Model, Institute of Social Safety Science, Journal of Social Safety Science, No.11, pp.147-156.
- **51.** Yasuhiro Komatsubara, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi (Nov. 2009): Development of the Strategic Knowledge Transfer Method to Construct the Responders' Knowledge Assets Learned from their Experience in Disasters, Institute of Social Safety Science, Journal of Social Safety Science, No.11, pp.135-146.
- **52.** Munenari Inoguchi, Haruo Hayashi, Keiko Tamura, Nozomu Yoshitomi (Nov. 2008): Implementation of Management System for Supporting Victims' Life Recovery Process Based on the Victim Master Database -Lessons Learned in Kashiwazaki City from 2007 Niigata Chuetsu-oki Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.10, pp.553-564.
- **53.** Eichi Yamazaki, Haruo Hayashi, Keiko Tamura, Munenari Inoguchi (Nov. 2008): Policy and Legal Affairs to Formulate Disaster Victim's Information Registration and Retrieval System -Based on the Current Situation in Kashiwazaki, Niigata-, Institute of Social Safety Science, Journal of Social Safety Science, No.10, pp.311-320.
- **54.** Keiko Tamura, Haruo Hayashi, Reo Kimura, Munenari Inoguchi (Nov. 2008): The Development of Support System for Enabling Effective Reponse to Disasters on the Basis of Problem-solving Method -In the Case of the Niigataken Chuetsu-oki Earthquake in 2007-, Institute of Social Safety Science, Journal of Social Safety Science, No.10, pp.483-494.
- **55.** Yasuhiro Komatsubara, Haruo Hayashi, Norio Maki, Keiko Tamura, Go Urakawa, Nozomu Yoshitomi, Munenari Inoguchi, Kanehisa Fujiharu (Nov. 2008): Visualization Business

- Process of Damage Certificate Issuing process from Ethnographical Interviews, Institute of Social Safety Science, Journal of Social Safety Science, No.10, pp.77-88.
- **56.** Takashi Furuya, Haruo Hayashi, Go Urakawa, Kanehisa Fujiharu, Keiko Tamura, Munenari Inoguchi, Hiroko Sakai, Masafumi Nukaduka (Nov. 2008): Practical Utilization of Maps with Geo-Referential Relational Database to Support Measures for Recovery and Reconstruction at EMC-K, Niigata-ken Chuetsuoki Earthquake 2007, Institute of Social Safety Science, Journal of Social Safety Science, No.10, pp.301-310.
- **57.** INOGUCHI, M., HAYASHI, H. and TAMURA, K. (Oct. 2008): How should local government integrate the information of affected people to support their life recovery continuously and effectively? A case study at Kashiwazaki City, Niigata, Japan -, 14th World Conference on Earthquake Engineering Proceedings, CD-ROM(8pp.).
- **58.** INOGUCHI, M., HAYASHI, H. and KEHRLEIN, D. (Nov. 2007): Development of Logistic Estimation System based on HAZUS Damage Estimations for Rational and Effective Decision Making in Disaster Response, 2nd International Conference on Urban Disaster Reduction Proceedings, CD-ROM (6pp.).
- **59.** SATO, S., HAYASHI, H., MAKI, N. and INOGUCHI, M. (Nov. 2007): Development of Automatic Keyword Extraction System from Digitally Accumulated Newspaper Articles on Disasters, 2nd International Conference on Urban Disaster Reduction Proceedings, CD-ROM (6pp.).
- **60.** Munenari Inoguchi, Haruo Hayashi, Nozomu Yoshitomi, Go Urakawa, Kanehisa Fujiharu (Nov. 2007): Coaching Effective Operation Procedures using GEOINT Database for Local Disaster Responders based on Short-term Education Model -A Case Study of Wajima City at 2007 Noto Hanto Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.9, pp.177-187.
- **61.** Kazuhiro Takeuchi, Haruo Hayashi, Go Urakawa, Munenari Inoguchi, Shosuke Sato (Nov. 2007): Development of "Visualization" Method of Crisis Response Operations for Efficient Crisis Response -Case Study in Shiga Prefecture Crisis Management Plan Development-, Institute of Social Safety Science, Journal of Social Safety Science, No.9, pp.111-120.
- **62.** Keiko Tamura, Haruo Hayashi, Norio Maki, Reo Kimura, Munenari Inoguchi (Nov. 2007): The Development of the Method for Risk Identification and Assessment in the Process of Participatory Strategic Planning for Risk Management, Institute of Social Safety Science, Journal of Social Safety Science, No.9, pp.225-234.
- **63.** Shosuke Sato, Haruo Hayashi, Norio Maki, Munenari Inoguchi (Nov. 2007): The External Validity of an Algorithm Using TFIDF to Extract the Set of Keywords of Corpus about Disasters and Crises, Institute of Social Safety Science, Journal of Social Safety Science, No.9, pp.65-74.
- **64.** Munenari Inoguchi, Haruo Hayashi, Mitsuhiro Higashida (Nov. 2006): Development of Business Flow Definition Procedure by Means of the Collaboration between Client and System Engineers for Design Requirements of Disaster Response Support System -A Case

- Study at Nara Prefecture Government-, Institute of Social Safety Science, Journal of Social Safety Science, No.8, pp.173-182.
- **65.** Shosuke Sato, Haruo Hayashi, Norio Maki, Munenari Inoguchi (Nov. 2006): The Development of an Algorithm Using the TFIDF/TF Index to Extract Automatically the Set of Keywords of Corpus about Fields Related to Emergency Management -A Case Study Utilizing Web News Articles for the 2004 Niigata-Ken-Chuetsu Earthquake Disaster-, Institute of Social Safety Science, Journal of Social Safety Science, No.8, pp.367-376.
- **66.** Munenari Inoguchi, Haruo Hayashi, Go Urakawa, Shosuke Sato (Nov. 2005): Evaluating Information Management Processes at Emergency Operation Center in terms of Incident Command System -A Case Study of Ojiya City at the 2004 Niigata-ken Chuetsu Earthquake-, Institute of Social Safety Science, Journal of Social Safety Science, No.7, pp.103-112.
- **67.** AGUSA, M., HAYASHI, H., URAKAWA, G. and YOSHITOMI, N., Use of GIS in the Japan-based Crisis Management System Combat GIS in the Field Survey of Niigata Rainfall Disaster -, 1st International Conference on Urban Disaster Reduction Proceedings, CD-ROM (8pp.), 2005.1.
- **68.** Munenari Agusa, Haruo Hayashi, Shigeo Tatsuki, Keiko Tamura (Nov. 2003): Development of an Electrical Supporting System for Multi Stakeholders Workshop, Institute of Social Safety Science, Journal of Social Safety Science, No.5, pp.343-352.

## **REPORTS**

- **1.** Munenari Inoguchi, et al. (Mar. 2014): "Development of Planning Model for Effective Countermeasures against Disasters and Risks based on Scientific Evidence", Risk Management Office, Niigata University, pp.168.
- **2.** Munenari Inoguchi, et al. (Mar. 2010): "Report: Promoting to Cross-border Activities over City Departments toward Realizing Common Operational Picture Using GIS in Kashiwazaki City", Niigata University, pp.102.
- **3.** Munenari Inoguchi, et al. (Mar. 2010): "Report: Developing Management Plan for Evacuation Shelter in the method of Business Flow Diagram", Niigata University, pp.500. *Others 6 reports were published from 2009 to 2010*.

### **NEWSLETTER ARTICLES**

**1.** Munenari Inoguchi (Jul. 2013): "Protecting university and local community from various risks using GIS", GIS NEXT (magazine), Next Square, pp.71.

**2.** Munenari Inoguchi (Mar. 2012): "Activities of Emergency Mapping Team supporting for National Government to develop Common Operational Picture at Great East Japan Earthquake in 2011", Journal of IECIE, Vol.95, No.3, pp224-230.

- **3.** Munenari Inoguchi (Jul. 2011): "Victims Master Database for realization of effective victims life reconstruction", The Society for the consumers of Kansai, Consumer's Eye (magazine), No. 422, pp.16-18.
- **4.** Munenari Inoguchi (Jul. 2011): "How to manage capability of local government in ICT society after disaster occurrence", The Tokyo Institute for Municipal Research, Journal of Municipal Research, No. 102, pp.15-20.
- **5.** Munenari Inoguchi (Apr. 2011): "Emergency Mapping Team aggregated Spatial Information provided by various agencies", GIS NEXT (magazine), Vol. 35, pp.12-15.

### **AWARDS AND HONORS**

- **1. August, 2008.** Obtained Special Achievement in GIS Award from Environmental Systems Research Institute, Inc.
- **2. June, 2009.** Obtained Encouragement Prize Paper Award from Institute of Social Safety Science as a member of project team.
- **3.** October, 2014. Obtained Good Design Award to An Integrated Information Management System for Disaster Victims' Life Reconstruction as a producer of system development.
- **4. October, 2014.** Obtained Best Poster Award from The International Emergency Management Society as co-author.
- **5. July, 2008.** Obtained certificate of appreciation from Niigata prefecture to activities of Emergency Mapping Center at Niigata Chuetsu Earthquake in 2007.
- **6. July, 2008.** Obtained certificate of appreciation from Kashiwazaki city to activities of Support for victims' life reconstruction at Niigata Chuetsu Earthquake in 2007.
- **7. March**, **2012.** Obtained certificate of appreciation from Iwate prefecture to activities of development Victims' Master Database at Great East Japan Earthquake in 2011.
- **8. February, 2014.** Obtained certificate of appreciation from Kyoto prefecture to activities of Damage Certificate Issuing Support at Typhoon No.18 in 2013.
- **9.** March, 2014. Obtained certificate of appreciation from Fukuchiyama city to activities of Realization of Effective Building Damage Assessment Using Online-based Application at Typhoon No.18 in 2013.
- **10. May, 2015.** Obtained certificate of appreciation from Fukuchiyama city to activities of Damage Certificate Issuing and Building Damage Assessment Support at Heavy Rainfall Disaster in 2014.

### MEMBERSHIPS OF ACADEMIC SOCIETIES

- 1. 2005 up to now. Japan Society for Natural Disaster Science
- 2. 2005 up to now. Institute of Social Safety Science
- 3. 2006 up to now. Japan Society for Civil Engineering
- **4. 2006 up to now.** GIS Association of Japan
- **5. 2007 up to now.** Japan Association for Earthquake Engineering
- **6.** 2009 up to now. The Institute of Electronics, Information and communication Engineers
- 7. 2014 up to now. The International Emergency Management Society

## **ACTIVITIES IN ACADEMIC SOCIETIES**

- **1. June, 2016 up to now.** Information and Communication Technology for Safe and Secure Life Committee, The Institute of Electronics, Information and communication Engineers, member of organizers.
- **2.** May, 2013 May, 2016. Information and Communication Systems for Safe and Secure Life Committee, The Institute of Electronics, Information and communication Engineers, member of organizers.
- **3.** May, 2009 up to now. Information and Communication Network for Safe and Secure Life Committee, The Institute of Electronics, Information and communication Engineers, member of organizers.
- **4.** May, 2011 up to now. Disaster Information Management System Research Committee, Institute of Social Safety Science, member of organizers.
- **5. July, 2014 up to now.** The International Emergency Management Society, board member of Japan Chapter.

### COMPETITIVE RESEARCH FUNDS

- 1. "Development of Standardized Business Flow Model for Victims
  Life Recovery based on Victims Master Database with
  Geo-reference", Grant-in-Aid for Young Scientists (Start-up) by
  MEXT Japan KAKENHI, #20810012 (Principal Investigator)

  Jun.2008-Mar.2010

  JPY 3,341,000
- 2. "Development of Resource Estimation Model for Victims Life Apr.2010-Mar.2013 Reconstruction using GIS", Grant-in-Aid for Young Scientists (B)

	by MEXT Japan KAKENHI, #22710161 (Principal Investigator)	JPY 2,860,000
3.	"Realizing Information Integration Technology Using Geo-referential Relationship for Effective Disaster Response", Information Environment and Humans in RESTO by Japan Science and Technology Agency (Principal Investigator)	Oct.2010-Sep.2013
		JPY 35,000,000
4.	"Developing Personal-File of Victims' Life Reconstruction Process	Apr.2015-Mar.2018
	based on Interactive Communication Using Near Field Communication Technology", Grant-in-Aid for Young Scientists (B) by MEXT Japan KAKENHI, #15K16299 (Principal Investigator)	JPY 3,900,000
5.	"Developing Integrated Database for Individual Evacuation Plan based on Multi-Hazard Information", Joint Research Fund by Earthquake Research Institute, University of Tokyo (Principal Investigator)	Apr.2015-Mar.2016 JPY 740,000
	-As a project member-	
1.	"The Conceptual and Action Framework Building for Disaster Risk Reduction among People with Special Needs in Time of Disasters", Grant-in-Aid for Scientific Research (A) by MEXT Japan KAKENHI, #20241041 (PI: Shigeo Tatsuki)	Apr.2008-Mar.2013
		JPY 2,500,000

# **Teaching & Advising**

### **COURSES TAUGHT**

### For Students in Universities

- **1. 2005.** Risk Management, Kyoto University (partially)
- 2. 2008 2015. Life Reconstruction Process after Disasters, Niigata University (partially)
- **3. 2008.** Introduction of GIS Literacy, Niigata University (partially)
- **4.** 2009 2013. Advanced Practice using GIS, Niigata University (partially)
- **5. 2010 2012.** Information System for Urban Society, Niigata University
- **6. 2010 2015.** Disaster Prevention and Risk Management, Tohoku Koeki Bunka University
- 7. 2013 2015. Structure of Information Management System, Niigata University
- 8. 2016 2017. Practice of Programing, Shizuoka University
- **9. 2016 2017.** Practice of Computer System, Shizuoka University (partially)
- **10.2016 up to now.** Practice of Developing Information Products, Shizuoka University

## For Students outside Universities

- **1. 2014 up to now.** Warning, Alert and Evacuation, Specialist Training Program, Cabinet Office, Government of Japan
- **2. 2011 2012.** GIS Training for local disaster prevention, College of Land, Infrastructure, Transport and Tourism, Government of Japan

## ACTUAL DISASTER RESPONSE SUPPORT

- **1. Aug. Oct. 2014:** Realization of Fastest Practice of Damage Certificate Issuing using Online-based application for Effective Building Damage Assessment at Fukuchiyama city affected by Heavy Rainfall Disaster in 2014.
- **2.** Oct. 2013 up to now: Implementation of Cloud-based Victims Master Database System for Rational Victims Life Reconstruction Realization in Tokyo Metropolitan with a case of Landslide disaster affected Oshima town in 2013 as a cue.
- **3. Sep. Oct. 2014:** Development of Online-based Building Damage Assessment System for cutting off the time/human-resource costs in Fukuchiyama city, affected by Typhoon No. 26 in 2013.
- **4. Aug. Sep. 2013:** Implementation of Effective ICT System and Management Organization for Damage Certificate Issuing at Toshima ward affected by heavy rainfall in 2013.

**5. Aug.** – **Sep. 2012:** Designing and Developing an Effective ICT System for Issuing Damage Certification to each victim at Uji city affected by heavy rainfall in 2012.

- **6. Apr. 2011 up to now:** Developing the standardized Victims Master Database integrating any kinds information hold by affected local governments in Iwate Prefecture on the web at the 2011 off the Pacific coast of Tohoku Earthquake.
- **7. Mar. 2011 Apr. 2011:** Responsible as a on-the spot team leader of Emergency Mapping Team in Cabinet Office of Japan at the 2011 off the Pacific coast of Tohoku Earthquake.
- **8. Jun. 2008 Aug. 2008:** Responsible as a team leader of Emergency Mapping Center in Miyagi Prefecture and Iwate Prefecture to develop Common Operational Pictures for effective disaster response to the Iwate-Miyagi Nairiku Earthquake in 2008.
- **9. Jul. 2007 Mar. 2011:** Responsible as a manager of system designing and developing team for Victims Master Database for effective and rational disaster response to the Niigataken Chuetsu-oki Earthquake in 2007.
- **10. Jul. 2007 Aug. 2007:** Responsible as a team leader of Emergency Mapping Center in Niigata Prefecture to develop Common Operational Pictures for effective disaster response to the Niigataken Chuetsu-oki Earthquake in 2007.
- **11. Mar. 2007 Jul. 2007:** Responsible as a manager of supporting team for victims life reconstruction process using GIS at Noto Hanto Earthquake in 2007.
- **12. Jan. 2005:** Providing and developing the maps of damage situation using GIS in web-based platform at Indian Ocean Earthquake and Tsunami in 2004.
- **13.Oct. 2004 Nov. 2004:** Supporting for effective Damage Cetificate Issuing Process in Odiya City at Mid Niigata Prefecture Earthquake in 2004

<Vitae April 1, 2018>