

DEPARTMENT OF INTEGRATED SCIENCE AND ENGINEERING  
FOR SUSTAINABLE SOCIETY  
CHUO UNIVERSITY  
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## IKUHO YAMADA

### Research Interests

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Spatial statistics and quantitative spatial analysis

*Keywords:* Network-based spatial analysis, spatial cluster detection, local statistics, space-time analysis, spatial surveillance

Spatial information science and GIS (Geographic Information Systems)

*Keywords:* Health GIS, software development, space-time modeling

Medical and health geography

*Keywords:* Environment and health, spatial and space-time analysis of disease risk, disease and syndromic surveillance

Neighborhood environments and human health

*Keywords:* Physical activity and obesity, neighborhood walkability, healthy cities, compact cities, public transportation services, food environment, urban sustainability

### Education

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- 2004 Doctor of Philosophy (Geography), University at Buffalo, The State University of New York  
1999 Master of Engineering (Urban Engineering), University of Tokyo, Japan  
1997 Bachelor of Engineering (Urban Engineering), University of Tokyo, Japan

### Academic Experience

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#### Employment

- 2013-present Professor, Department of Integrated Science and Engineering for Sustainable Society, Chuo University  
2013-present Visiting Researcher, Center for Spatial Information Science, University of Tokyo  
2011-2013 Associate Professor, Interfaculty Initiative in Information Studies, University of Tokyo  
2010-2013 Associate Professor, Center for Spatial Information Science, University of Tokyo  
2010-present Research Assistant Professor, Department of Geography, University of Utah  
2006-2010 Assistant Professor, Department of Geography, University of Utah  
2009-2010 Assistant Investigator, Institute of Public and International Affairs, University of Utah

- 2004-2006 Assistant Professor, Department of Geography and School of Informatics, Indiana University-Purdue University Indianapolis
- 2001-2004 Research Assistant, National Center for Geographic Information and Analysis, University at Buffalo, The State University of New York
- Other experience
- Jan. 2011- Editorial Board member of *Computers, Environment and Urban Systems*
- Sep. 2011-Sep. 2012 Member of “Housing and Land Survey 2013” Study Group (Statistics Bureau, Ministry of Internal Affairs and Communications)
- 2010- Editorial Board member of *International Regional Science Review*
- Guest editor of a special issue of *Journal of Geographical Systems*

## **Publications and Presentations**

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### Journal articles (refereed)

- Zick, C.D., H. Hanson, J.X. Fan, K.R. Smith, L. Kowaleski-Jones, B.B. Brown, and **I. Yamada**. “Re-Visiting the Relationship between Neighbourhood Environment and BMI: An Instrumental Variables Approach to Correcting for Residential Selection Bias.” *International Journal of Behavioral Nutrition and Physical Activity*, 10(27), February 2013.
- Yamada, I.**, B.B. Brown, K.R. Smith, C.D. Zick, L. Kowaleski-Jones, and J.X. Fan. “Mixed Land Use and Obesity: An Empirical Comparison of Alternative Land Use Measures and Geographic Scales.” *The Professional Geographer*, 64 (2), 2012, 157-177.
- Smith, K.R., C.D. Zick, L. Kowaleski-Jones, B.B. Brown, J.X. Fan, and **I. Yamada**. “Effects of Neighborhood Walkability on Healthy Weight: Assessing Selection and Causal Influences.” *Social Science Research*, 40 (5), 2011, 1445-1455.
- Yamada, I.** and J.-C. Thill. “Local Indicators of Network-constrained Clusters in Spatial Patterns Represented by a Link Attribute.” *The Annals of the Association of American Geographers*, 100 (2), 2010, 269-285.
- Zick, C.D., K.R. Smith, J.X. Fan, B.B. Brown, **I. Yamada**, and L. Kowaleski-Jones. “Running to the Store? The Relationship between Neighborhood Environments and the Risk of Obesity.” *Social Science and Medicine*, 69 (10), 2009, 1493-1500.
- Brown, B., **I. Yamada**, K. Smith, C. Zick, L. Kowaleski-Jones, and J. Fan. “Mixed Land Use and Walkability: Variations in Land Use Measures and Relationships with BMI, Overweight, and Obesity.” *Health and Place*, 15, 2009, 1130-1141.
- Siebeneck, L.K., R.M. Medina, **I. Yamada**, and G.F. Hepner. “Spatial and Temporal Analyses of Terrorist Incidents in Iraq, 2004-2006.” *Studies in Conflict and Terrorism*, 32 (7), 2009, 591-610.
- Yamada, I.**, P.A. Rogerson, and G. Lee. “GeoSurveillance: A GIS-based System for the Detection and Monitoring of Spatial Clusters.” *Journal of Geographical Systems* (a special issue), 11 (2), 2009, 155-173.
- Smith, K.R., B.B. Brown, **I. Yamada**, L.R. Kowaleski-Jones, C.D. Zick, and J.X. Fan. “Walkability and Body Mass Index: Density, Design, and New Diversity Measures.” *American Journal of Preventive Medicine*, 35 (3), 2008, 237-244.
- Yamada, I.** and J.-C. Thill. “Local Indicators of Network-constrained Clusters in Spatial Point Patterns.” *Geographical Analysis*, 39 (3), 2007, 268-292.

- Rogerson, P. A. and **I. Yamada**. "Approaches to Syndromic Surveillance When Data Consist of Small Regional Counts." *The 2003 National Syndromic Surveillance Conference Proceedings* (as a supplement of the *Morbidity and Mortality Weekly Report*), 53 (Suppl.), 2004, 79-85.
- Yamada, I.** and J.-C. Thill. "Comparison of Planar and Network *K*-functions in Traffic Accident Analysis." *Journal of Transport Geography*, 12, 2004, 149-158.
- Rogerson, P. A. and **I. Yamada**. "Monitoring Change in Spatial Patterns of Disease: Comparing Univariate and Multivariate Cumulative Sum Approaches." *Statistics in Medicine*, 23 (14), 2004, 2195-2214.
- Yamada, I.** and J.-C. Thill. "Enhancing Stated Preference Surveys in Transportation Research: The Contribution of Geographic Information Systems." *Transportation Planning & Technology*, 26 (5), 2003, 377-396.
- Yamada, I.** and P. A. Rogerson. "An Empirical Comparison of Edge Effect Correction Methods Applied to *K*-function Analysis." *Geographical Analysis*, 35 (2), 2003, 97-109.
- Okabe, A. and **I. Yamada**. "The *K*-function Method on a Network and its Computational Implementation." *Geographical Analysis*, 33 (3), 2001, 271-290.
- Yamada, I.** and A. Okabe. "The *K* Function Methods on a Network." *Theory and Applications of GIS*, 8 (1), 2000, 75-82 (in Japanese).
- Yamada, I.** and Y. Sadahiro. "An Empirical Analysis of Consumers' Evaluation on Department Stores." *Journal of Applied Regional Science*, 3, 1998, 49-60 (in Japanese).

#### Book

- Rogerson, P.A. and **I. Yamada**. *Statistical Detection and Surveillance of Geographic Clusters*. CRC Press. 2009.

#### Other publications

- Yamada, I.** "Neighborhood Living Environments and the Housing and Land Survey: From the Perspective of Medical and Health Geography." *Tokei*, July 2013, 27-32 (in Japanese). [Un-refereed journal article]
- Yamada, I.** "A Review of 'Geographies of Obesity: Environmental Understandings of the Obesity Epidemic.'" *The Professional Geographer*, 63 (1), 2011, 148-150. [Book review]
- Lee, G., P.A. Rogerson, and **I. Yamada**. "GeoSurveillance: A GIS-based Exploratory Spatial Analysis Tool for Monitoring Spatial Patterns and Clusters." In Fischer, M.M. and A. Getis (eds.): *Handbook of Applied Spatial Analysis*. Springer. 2009. [Book chapter]
- Yamada, I.** "An Empirical Analysis of Consumers' Evaluation on Department Stores." In Asami, Y., Y. Sadahiro, and T. Ishikawa (eds.): *New Frontiers in Urban Analysis: Collected Reviews*. CRC Press. 2009, 133-158. [Book chapter]
- Yamada, I.** "Edge Effects." In Kitchin, R. and N. Thrift (eds.): *International Encyclopedia of Human Geography*. Oxford: Elsevier. 2009, 3, 381-388. [Encyclopedia entry]
- Liu, G.C., J.T. Colbert, J.S. Wilson, **I. Yamada**, and S.C. Hoch. "Examining Urban Environment Correlates of Childhood Physical Activity and Walkability Perception with GIS and Remote Sensing." In Jensen, R.R., J.D. Gatrell, and D.D. McLean (eds.): *Geo-Spatial Technologies in Urban Environments Policy, Practice, and Pixels, Second Edition*. Berlin: Springer-Verlag. 2007, 121-140. [Book chapter]

Conference and other presentations (\* : as presenter)

- \* **Yamada, I.** and A. Okabe. "Toward More Robust Testing of Spatial Autocorrelation by Moran's *I* Statistics." *Regional Conference of the International Geographical Union*, Kyoto International Conference Center, Japan, August 2013.
- \* **Yamada, I.** "A Space-time Analysis of the Risk of Low Birthweight and Neighborhood Contextual Factors." *Regional Conference of the International Geographical Union*, Kyoto International Conference Center, Japan, August 2013.
- \* **Yamada, I.** and A. Okabe. "A New Approach to Testing Spatial Autocorrelation by Moran's *I* Statistics." *The Study Meeting of the Association of Japanese Geographers Spring 2013*, Rishsho University, Japan, March 2013.
- Kato, H., **I. Yamada**, and Y. Asami. "A Study of Evaluation Structure of Neighborhood Walking Environments by the Elderly Residing around a Train Station." *The Study Meeting of the Association of Japanese Geographers Fall 2012*, Kobe, Japan, October 2012.
- \* **Yamada, I.** "Expanding Possibilities of Spatial Analysis of Health by Spatial Information." Understanding Space - Space, Information, and Human -. *Annual Symposium by Interfaculty Initiative in Information Studies and Center for Spatial Information Science, University of Tokyo*. Tokyo, Japan, May 2012. [Invited presentation]
- \* **Yamada, I.** and A. Okabe. "New Approaches to Moran's *I* Test of Spatial Autocorrelation." *The Association of American Geographers 108th Annual Meeting*, New York, NY, February 2012.
- \* **Yamada, I.** "Spatial Inequality in the Risk of Low Birthweight in the Greater Los Angeles Area, California, USA." *The 25th Annual Meeting of the Applied Regional Science Conference*, Toyama, Japan, December 2011.
- \* **Yamada, I.** "Risk of Low Birthweight and Neighborhood Contextual Factors: A Case Study in the Greater Los Angeles Area, California, USA." *Papers and Proceedings of the Geographic Information Systems Association*, 20, Kagoshima, Japan, October 2011.
- \* **Yamada, I.** "Toward Healthy Neighborhood Environments: Obesity Research in the United States as an Example." Symposium II: Safety and Health of Children. *The 70th Annual Conference of the Japanese Educational Research Association*, Chiba, Japan, August 2011. [Invited presentation]
- \* **Yamada, I.** "Spatial Variations in Associations between Neighborhood Walkability and Socio-demographic Characteristics: A Case Study in Utah." *The Association of American Geographers 107th Annual Meeting*, Seattle, WA, April 2011.
- \* **Yamada, I.** "Space-time Analysis of the Risk of Low Birthweight in the Greater Los Angeles Area, California, 1985-2004." *The Study Meeting of the Association of Japanese Geographers Spring 2011*, Tokyo, Japan, March 2011. (The meeting was cancelled due to the 2011 Tohoku earthquake and tsunami.)
- \* **Yamada, I.**, B.B. Brown, K.R. Smith, C.D. Zick, J.X. Fan, and L.R. Kowaleski-Jones. "Neighborhood Walkability and Obesity: A Case Study in Salt Lake City, Utah, USA." *Papers and Proceedings of the Geographic Information Systems Association*, 19, Kyoto, Japan, November 2010.
- \* **Yamada, I.** "Space-time analysis of the risk of low birthweight in California, 1985-2004." *CSIS DAYS 2010*, Kashiwa Campus, University of Tokyo, Japan, October 2010.

- \* **Yamada, I.**, B.B. Brown, K.R. Smith, C.D. Zick, J.X. Fan, L.R. Kowaleski-Jones, and H. Hanson. “Potential Benefit of Light Rail Transit Services to Reduce the Risk of Obesity: Selection vs. Causation.” *The Association of American Geographers 106th Annual Meeting*, Washington, DC, April 2010.
- \* **Yamada, I.** “Space-time Analysis of the Risk of Low Birthweight in California, 1985-2004.” *The 56th Annual North American Meetings of Regional Science Association International*, San Francisco, CA, November 2009.
- \* **Yamada, I.**, B.B. Brown, K.R. Smith, C.D. Zick, L.R. Kowaleski-Jones, and J.X. Fan. “Neighborhood Land Use Diversity and Individual Weight Status: A Case Study in Salt Lake County, UT.” *The Association of American Geographers 105th Annual Meeting*, Las Vegas, NV, March 2009.
- \* **Yamada, I.**, B.B. Brown, K.R. Smith, C.D. Zick, L.R. Kowaleski-Jones, and J.X. Fan. “Measuring Neighborhood Walkability for Obesity Research.” *The 55th Annual North American Meetings of the Regional Science Association International*, New York City, NY, November 2008.
- Zick, C.D., K.R. Smith, J.X. Fan, B.B. Brown, **I. Yamada**, and L.R. Kowaleski-Jones. “Running to the Store? The Relationship between Neighborhood Environments and the Risk of Obesity.” *The 2008 Joint Annual Meeting of the American Agricultural Economics Association and the American Council on Consumer Interests*, Orland, FL, July 2008.
- Michishita, R., B. Xu, and **I. Yamada**. “Time-series Network Analysis of Civil Aviation in Japan, 1985–2005.” *The 16th International Conference on Geoinformatics and the Joint Conference on GIS and Built Environment*, Guangzhou, China, June 2008.
- \* **Yamada, I.**, K.R. Smith, C.D. Zick, L.R. Kowaleski-Jones, B.B. Brown, and J.X. Fan. “Neighborhood Environments and Obesity: A Comparison between Youth and Young Adults to Assess Selection and Causal Influences.” *The Association of American Geographers 104th Annual Meeting*, Boston, MA, April 2008.
- \* **Yamada, I.**, P.A. Rogerson, and G. Lee. “GeoSurveillance: GIS-based Monitoring System for Detection of Geographic Clusters.” *The 54th Annual North American Meetings of the Regional Science Association International*, Savannah, GA, November 2007.
- \* **Yamada, I.** “Teen Pregnancies and Local Community Environments: A Case Study in Marion County, Indiana.” *The Association of American Geographers 103rd Annual Meeting*, San Francisco, CA, April 2007.
- Smith, K.R., B.B. Brown, J.X. Fan, C.D. Zick, and **I. Yamada**. “Where Weight Waxes and Wanes: Spatial Variation in Adult Body Mass Index.” *The Population Association of America 2007 Annual Meeting*, New York, NY, March 2007.
- \* **Yamada, I.** and K.F. Comer. “Exploratory Modeling of Teen Pregnancy Prevalence Using a GIS-based Community Information System.” *The 134th Annual Meeting & Exposition of the American Public Health Association*, Boston, MA, November 2006.
- \* **Yamada, I.** and K. Frederickson. “Teen Pregnancy and Community Environments: Inductive Learning Approaches with a GIS-based Community Information System.” *The 37th Annual Meeting of the Mid-continent Regional Science Association*, Indianapolis, IN, June 2006.
- \* **Yamada, I.** and K. Frederickson. “Exploratory Modeling of Teenage Pregnancy Prevalence.” *The Association of American Geographers 102nd Annual Meeting*, Chicago, IL, March 2006.

- \* **Yamada, I.** and J.-C. Thill. “Local Indicators of Network-constrained Clusters in Spatial Phenomena Represented by a Link Attribute.” *The 52nd Annual North American Meetings of the Regional Science Association International*, Las Vegas, NV, November 2005.
- \* **Yamada, I.** “Local Indicators of Network-constrained Clusters for a Spatial Point Pattern.” *The Association of American Geographers 101st Annual Meeting*, Denver, CO, April 2005.
- \* **Yamada, I.** and J.-C. Thill. “Hot Spot Detection in a Network Space.” *The 51st Annual North American Meetings of the Regional Science Association International*, Seattle, WA, November 2004.
- Rogerson, P.A. and **I. Yamada.** “GeoSurveillance: Software for Monitoring Change in Geographic Patterns.” *Proceedings Part 2 of Computational Science and Its Applications – ICCSA 2004: International Conference (as Lecture Notes in Computer Science)*, 3044, 1096-1106, Assisi, Italy, May 2004.
- \* **Yamada, I.** and P.A. Rogerson. “Detecting Changes in Spatial Patterns of Disease: A GIS Application.” *The Regenstrief Institute Work-in-Progress Seminar* at Indiana University-Purdue University Indianapolis, IN, October 2004.
- \* **Yamada, I.** “Detection and Analysis of Local Spatial Clusters in a Network Space.” *The Association of American Geographers 100th Annual Meeting*, Philadelphia, PA, March 2004.
- \* **Yamada, I.** and J.-C. Thill. “Local Scale  $K$ -function Analysis for a Network-Constrained Spatial Phenomenon.” *The 50th Annual North American Meetings of the Regional Science Association International*, Philadelphia, PA, November 2003.
- Rogerson, P.A. and **I. Yamada.** “Spatial Surveillance for Public Health Applications.” *GeoMed 03*, Baltimore, MD, October 2003.
- Rogerson, P.A. and **I. Yamada.** “GeoSurveillance: Software for Monitoring Changes in Geographic Patterns with Applications to Public Health.” *National Syndromic Surveillance Conference 2003*, New York, NY, October 2003.
- \* **Yamada, I.** and P.A. Rogerson. “Alternative Approaches for Syndromic Surveillance.” *Joint Statistical Meetings 2003*, San Francisco, CA, August 2003.
- Rogerson, P.A. and **I. Yamada.** “Monitoring Changes in Spatial Patterns of Disease with Cumulative Sum Approaches: A GIS Application.” *UB This Summer, Career Perspectives series, Bioinformatics*, University at Buffalo, NY, June 2003.
- \* **Yamada, I.** and P.A. Rogerson. “A GIS Application for the Quick Detection of Changes in Spatial Patterns of Disease Using Cumulative Sum Methods.” *The Association of American Geographers 99th Annual Meeting*, New Orleans, LA, March 2003.
- Rogerson, P.A. and **I. Yamada.** “Monitoring Health Data for the Quick Detection of Changes in Geographic Patterns.” *The Association of American Geographers 99th Annual Meeting*, New Orleans, LA, March 2003.
- \* **Yamada, I.** and J.-C. Thill. “Empirical Comparisons of Planar and Network  $K$ -functions in Traffic Accident Analysis.” *Transportation Research Board 82nd Annual Meeting*, Washington, D.C., January 2003.
- Rogerson, P.A., **I. Yamada,** and D. Han. “Quick Detection of Spatial and Temporal Clusters of Disease.” *12th Conference of the International Society of Exposure Analysis and 14th Conference of the International Society for Environmental Epidemiology*, Vancouver, BC, Canada, August 2002.

- \* **Yamada, I.** and J.-C. Thill. “An Empirical Comparison of the Performances of Planar and Network  $K$ -functions.” *The Association of American Geographers 98th Annual Meeting*, Los Angeles, CA, March 2002.
- \* **Yamada, I.** and J.-C. Thill. “A Prototypical Application of GIS to a Stated Preference Survey.” *The 48th North American Meetings of the Regional Science Association International*, Charleston, SC, November 2001.
- Goto, Y., **I. Yamada**, A. Okabe, T. Yamazaki, H. Kohsaka, T. Kaneko, and K. Takami. “A Basic Analysis of Time-Space Behavior of Sports-Club Members.” *Papers and Proceedings of the Geographic Information Systems Association*, 9, 219-223, Tokyo, Japan, November 2000 (in Japanese).
- \* **Yamada, I.**, Y. Sadahiro, and A. Okabe. “A Market Area Analysis of Karasuyama Shopping Mall Using the Data Obtained from its Customers’ Cards.” *Papers and Proceedings of the Geographic Information Systems Association*, 8, 47-52, Tokyo, Japan, November 1999 (in Japanese).
- Yamada, I.** and A. Okabe. “The  $K$  Function Method on a Network and its Computational Implementation.” *Discussion Paper Series*, Center for Spatial Information Science at the University of Tokyo, Japan, 1999 (in Japanese).
- Okabe, A., K. Okunuki, **I. Yamada et al.** “Building a City Planning Information System Using a Internet Homepage.” *Papers and Proceedings of the Geographic Information Systems Association*, 5, 7-12, Tokyo, Japan, November 1996 (in Japanese).

## **Grants and Awards**

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- Grant-in-Aid for Young Scientists (B), Japan Society for the Promotion of Science, the Ministry of Education, Culture, Sports, Science and Technology: “Urban Walkability as a Health-Supporting Infrastructure for the Coming Super Aging Society.” PI, 04/2012-03/2015.
- Grant-in-Aid for Challenging Exploratory Research, Japan Society for the Promotion of Science, the Ministry of Education, Culture, Sports, Science and Technology: “Development of Innovative Analytical Methods for Spatial Autocorrelation to Test the First Law of Geography Correctly.” Co-investigator (PI: Atsuyuki Okabe, Aoyama Gakuin University), 04/2012-03/2015.
- Research Support Grant, Association of Real Estate Agents of Japan: “A Study on Survey Methods for the 2013 Housing and Land Survey in the Regions Stricken by the Tohoku Earthquake.” PI, 11/2011-10/2012.
- National Institutes of Health Research Project Grant (R01), National Cancer Institute: “Neighborhood Built and Social Environment and Physical Activity and Weight Status.” Co-investigator (PI: Ming Wen, Department of Sociology, University of Utah), \$1,245,000, 2010-2014. (\* Participated only in 2010.)
- National Poverty Center & Economic Research Service: “Alternative Measures of Food Environments in Poor and Non-Poor Neighborhoods,” Co-investigator (PIs: Jessie X. Fan and Lori R. Kowaleski-Jones, Department of Family and Consumer Studies, University of Utah), \$5,000, 2008.
- National Institutes of Health Exploratory/Developmental Research Grant (R21), National Institute of Diabetes, Digestive and Kidney Diseases: “Neighborhood Characteristics and Body Mass

Index: Selection or Causation?" Co-investigator (PIs: Lori R. Kowaleski-Jones and Ken R. Smith, Department of Family and Consumer Studies, University of Utah), \$275,000, 2008-2010. Additional administrative supplement of \$91,569, 2009.

Winner of the Population Association of America poster competition, 2007.

Research Support Grant, Southwest Consortium for Environmental Research and Policy: "Spatial Distribution of Teen Pregnancy Incidence in California and Baja California: Comparison between the Border and Non-border Regions," Principal investigator, \$16,000, 2006-2007.

Winner of the Regional Science Association International dissertation competition, 2005.

Winner of the Emerging Scholar Paper Competition, Spatial Analysis and Modeling Specialty Group in AAG, 2005.

Full scholarship to attend "Advanced spatial demography" workshop at the Max Planck Institute for Demographic Research in Rostock, Germany. Invited by Dr. Daniel Griffith. November 2005.

Grand-in-Aid for Minority Faculty Development, Office of Professional Development, Indiana University-Purdue University Indianapolis: "Spatial Prospective Surveillance of Nosocomial Infection Events Using Spatial Statistics and Geographic Information Systems," \$3,000, Principal investigator, 2005-2006.

Research Support Grant, Polis Center and School of Informatics, Indiana University-Purdue University Indianapolis: "Spatial Analysis of Community Health Issues Using SAVI Data," \$5,000, Principal investigator, 2005.

College of Arts and Sciences Dissertation Fellowship, University at Buffalo, State University of New York, 2003-2004.

Research Assistantship, National Center for Geographic Information and Analysis, 2001 - 2004.

CSISS Workshop Scholarship, Center for Spatially Integrated Social Science, 2001.

International Student Scholarship, Heiwa Nakajima Foundation (in Japan), 2000 - 2002.

## **Teaching Activities**

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Courses taught

*Chuo University*

- Introduction to Spatial Information Science (Fall 2013-)

*University of Tokyo*

- Basic Lectures in Applied Computer Science V: Introduction to Spatial Information Science (Summer 2012)
- Urban Analysis (Summer 2011-12; co-teaching)
- Spatial Information Analysis (Winter 2010; co-teaching)
- Exercise on Spatial Information Analysis (Winter 2010; co-teaching)

*University of Utah*

- Introduction to Medical Geography (Spring 2008, 2009)
- Detection and Monitoring of Spatial Clusters, Graduate Seminar (Fall 2007, 2009)
- Spatial Modeling with GIS (Spring 2007–2010)
- Network-based Spatial Analysis, Graduate Seminar (Spring 2007)
- Spatial Statistics (Fall 2006–2009)

*Indiana University-Purdue University Indianapolis*

- Introduction to Geographic Information Systems (Spring 2005, 2006)
- Health Applications of GIS (Spring 2005)
- Applied Spatial Statistics (Fall 2004, 2005)

*University at Buffalo*

- Spatial Statistics (Fall 2003 as a guest speaker)
- Transportation Modeling and GIS (Spring 2002 as a guest speaker)

Graduate student supervision (as a committee member)

*Ongoing*

Marissa Taddie: Ph.D., University of Utah

*Completed*

Md. Manjur Morshed, Ph.D., University of Tokyo, 2013

Kristoffer B. Berse, Ph.D., University of Tokyo, 2013

Koh Sueda, Ph.D., University of Tokyo, 2013

Tetsuo Kobayashi: Ph.D., University of Utah, 2010

Laura Siebeneck: Ph.D., University of Utah, 2010

Richard Medina: Ph.D., University of Utah, 2009

Christopher Upchurch: Ph.D., University of Utah, 2009

Marquessa Van Drimmelen: Master's, University of Utah, 2009

Andrea Bair: Master's, University of Utah, 2008.

Seth Anderson: Master's, University of Utah, 2007

James Colbert: Master's, Indiana University-Purdue University Indianapolis, 2006

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**Service Activities**

Manuscript reviewer for *The Annals of the Association of American Geographers*, *Computers, Environment and Urban Systems*, *Geographical Analysis*, *Health & Place*, *International Journal of Geographical Information Science*, John Wiley & Sons, *Journal of Geographical Systems*, *Papers in Regional Science*, *Statistics in Medicine*, and *The Professional Geographer*.

Proposal reviewer for National Science Foundation and Health Research Board Ireland.

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**Professional Affiliations**

*International*

Association of American Geographers

Regional Science Association International

*Japanese*

Applied Regional Science Conference

Association of Japanese Geographers

Association of Urban Housing Sciences

City Planning Institute of Japan

Geographic Information Systems Association in Japan

Human Geographical Society of Japan