Curriculum Vitae July 6, 2015

Katsuhiko "Kirk" Oda

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EDUCATION

Ph.D., Geography, Texas A&M University

May 2011

- Concentrations: Spatial Thinking, GIS Education, GIS Analysis for Urban Issues
- Dissertation: College Students' GIS Spatial Concept Knowledge Assessed by Concept Maps
- Advisor: Dr. Sarah Bednarz

M.A., Geography, The University of Toledo, Ohio

Dec 1998

- Concentrations: GIS, Cartography, Spatial Cognition
- Thesis: Blind Persons' Spatial Acquisition from Tactual Maps
- Advisor: Dr. Peter Lindquist

B.A., Geography, Nara University, Japan

Mar 1994

• Concentrations: GIS, Cartography

TEACHING EXPERIENCE

Graduate-level Courses Taught

Spatial Sciences Institute, University of Southern California

Aug 2011- Present

- Redesigned and taught an introductory-level GIS course, SSCI 581 Concepts for Spatial Thinking, as a course leader
 - o Instructor rating of 5.0 (out of 5) in a Spring 2015 course section
- Developed and taught a cartography course, SSCI 589 Cartography & Visualization, as a course leader
 - o Two students presented their maps at the 2013 Esri International User Conference
 - o Five students presented their maps at the 2014 Esri International User Conference
 - o Instructor rating of 4.8 (out of 5) in a Fall 2014 course section

- Developed and taught a new course, SSCI 593 Geospatial Data Integration
 - o Instructor rating of 4.6 (out of 5) in a Spring 2015 course section

Master's Theses Directed

- Benjamin Anderson, M.S., Geographic Information Science and Technology, University of Southern California
 - Thesis Title: Cartographic Approaches to the Visual Exploration of Violent Crime Patterns in Space and Time: A User Performance Based Comparison of Methods
- Corina Chung, M.S., Geographic Information Science and Technology, University of Southern California
 - Thesis Title: Integrating Spatial Visualization to Improve Public Health Understanding and Communication
- David Breeding, M.S., Geographic Information Science and Technology, University of Southern California
 - Thesis Title: Identifying and Locating the Need for Financial Education

Teaching Assistant

Department of Geography, Texas A&M University

Sep 2007- May 2009

- Taught all labs and graded all assignments for five sections of introductory-level physical geography courses
- Taught all GIS labs for three sections of a thematic cartography course
- Taught all GIS labs for two sections of an introductory-level GIS course

PUBLICATIONS

Refereed Journal Articles

- **Oda, K.** 2011. Assessing College Students' Spatial Concept Knowledge in Complexity Levels. *Procedia Social and Behavioral Sciences* 21: 63-72.
- Arrowsmith, C., Bagoly-Simo, P., Finchum, A., Oda, K. and Pawson, E. 2011. The Implications of Student Employability for the Design of Geography Curricula. *Journal of Geography in Higher Education* 35: 365-377.

Refereed Conference and Symposium Proceeding

 Oda, K. and Kamei, S. 2015. Maximizing the Online Experience: Developing a Master Course Shell with Faculty Consensus In UW-Madison Distance Teaching & Learning Conference. Madison, Wisconsin

Non-refereed Article

• **Oda, K.** Los Angeles: The Diversity of Neighborhoods in Terms of a Socio-demographic Perspective. *Shin-Chiri: The Geographic Education Society of Japan (written in Japanese)*

CONFERENCE PRESENTATIONS

- Oda, K. 2015. Designing a GIS Online Course with a Learner-Centered Paradigm. Association of American Geographers Annual Meeting, Chicago, Illinois.
- Oda, K. 2014. Online Course Materials for Spatial Thinking. ESRI Education User Conference, San Diego, California.
- Oda, K. 2013. Assessment Methods of Geospatial Concept Maps. International Geographic Union Kyoto Regional Conference, Kyoto, Japan.
- Oda, K. 2013. Implementing Spatial Thinking Training in GIS Course. Association of American Geographers Annual Meeting, Los Angeles, California.
- Oda, K., Hastings, J. and Mulhall, T. 2012. Development of a Graduate Cartography Course. ESRI Education User Conference, San Diego, California.
- Oda, K. 2011. Assessing College Students' Spatial Concept Knowledge in Complexity Levels. The International Conference "Spatial Thinking and Geographic Information Sciences," Tokyo, Japan.
- Oda, K. 2011. College Students' Understanding of Geospatial Concepts. Association of American Geographers Annual Meeting, Seattle, Washington.
- Oda, K. and Zhu, X. 2010. GIS Analysis of the Distance and Safety for School Transportation. ESRI Education User Conference, San Diego, California.
- Oda, K. 2010. Scoring Spatial Concept Maps for Two GIS Courses. Association of American Geographers Annual Meeting, Washington D.C.
- Oda, K. 2009. Spatial Concept Learning in College GIS Courses. National Council for Geographic Education Annual Meeting, San Juan, Puerto Rico.
- Oda, K. 2009. Assessment of Spatial Concept Maps. International Geographic Union Commission for Geography Education Conference, Tsukuba, Japan.
- Oda, K. 2009. GIS Undergraduate Students' Spatial Misconceptions. Association of American Geographers Annual Meeting, Las Vegas, Nevada.
- Oda, K. 2006. Blind persons' spatial knowledge acquisition from tactile maps. Association of American Geographers Annual Meeting, Chicago, Illinois.
- Oda, K. 2005. Visually Impaired Persons' Spatial Acquisition from Tactual Maps. Annual Meeting of the National Council for Geographic Education, Birmingham, Alabama.

PROFESSIONAL SERVICES

Conference and Symposium

- Panelist, Geography at a Distance: Best Practices in Teaching a Lower Division Introductory Course Online, Association of American Geographers Annual Meeting, 2015, Chicago, Illinois.
- Chairperson, Geography Education, International Geographic Union Kyoto Regional Conference, 2013, Kyoto, Japan.
- Panelist, International Students' Integration Experiences in Graduate Geography Programs, Association of American Geographers Annual Meeting, 2010, Washington D.C.
- Chairperson, Mental Process of Spatial Thinking, International Geographic Union Commission for Geography Education Conference, 2009, Tsukuba, Japan.
- Interpreter, Cultivating Students' Spatial Thinking for Geospatial Information-based Society: Learning from the Experiences of Geography Education in the US, July 27 2008 in Nara and July 28 2008 in Tokyo, Japan.

University

Spatial Sciences Institute, University of Southern California

- 2015 Member, GIST Thesis Prizes Committee
- 2014 Delivered a presentation, Streamlining Online Course Design for a Better Student Experience, in the November Instructional Designer faculty forum held by the Center of Scholarly Technology
- 2014 Delivered a presentation about use of rubrics for online class in the September Instructional Designer forum held by the Center of Scholarly Technology
- 2014 Conducted a session: Interactive Learning Components and Course Flow at the GIST Faculty / Staff Retreat
- 2014 Developed a template Blackboard course site for Spatial Sciences Institute
- 2013 Member, Spatial Sciences Institute Office Policy Committee
- 2013 Member, GIST Thesis Prizes Committee
- 2013 Organized two sessions: Concepts for Spatial Thinking and Interactive Learning & Pedagogy at the GIST Faculty / Staff Retreat

Academic Journal Reviews

- Transactions in GIS
- Review of International Geographical Education Online (RIGEO)

PROFESSIONAL DEVELOPMENT

• Participated in a training for SSCI 587 instructors, July 22-28 2013 on Santa Catalina Island, California.

- Participated in the International Network for Learning & Teaching Geography in Higher Education (INLT) workshop, April 11-13 2010 in Washington D.C.
- Participated in the Geography Faculty Development Alliance (GFDA) workshop for graduate students and early career faculty, June 15-21 2008 in Boulder, Colorado.

PROFESSIONAL MEMBERSHIPS

- Association of American Geographers
- National Council for Geographic Education

RESEARCH EXPERIENCE

Dissertation

College Students' GIS Spatial Concept Knowledge Assessed by Concept Maps

- Collected 60 concept maps from undergraduate students who were taking an introductory-level GIS course
- Scored concept maps and statistically analyzed those scores to examine participants' geospatial concept knowledge
- Found that participants successfully revised their first concept maps in the second session
- Found that participants' scores basically decreased as the complexity of geospatial concepts increased

Research Assistant

Department of Architecture, Texas A&M University

Sep 2009- May 2011

- Conducted GIS crime spatial analysis and network analysis for elementary school children's home-to-school routes in Austin, Texas
- Found crime hot spot areas by using the Getis-Ord Gi* spatial statistics method
- Found crime spatial patterns by using the Moran's I spatial statistics method
- Presented a paper at the 2010 ESRI Education User Conference
- Developed GIS datasets to support a research project that studies elementary school children's active school transportation

Master's Thesis

Blind Persons' Spatial Acquisition from Tactual Maps

- Set up experiments with 34 blind subjects' interpretation from tactile maps
- Found that blind participants were more likely to understand spatial relationships when line and point features are shown simultaneously

PROFESSIONAL EXPERIENCE

GIS Student Technician, Department of Architecture, Texas A&M University Summer 2009

GIS Analyst, Tokyo Cartographic Co. Ltd.

2000-2004

- Produced spatial data of street, lake, river, soil using ArcGIS
- Wrote two reports regarding Lake Kasumigaura using ArcGIS and ArcHydro

- Conducted research on manufacture of urban solid models using ArcGIS 3D Analyst and a rapid prototyping system
- Instructed two Kenyan apprentices

GIS Technician, Ecological Research Center of Kyoto University

1999-2000

• Structured GIS database of Lake Biwa using Arc/Info

Map Editor, Hyogen Kenkyujo Co. Ltd.

1994-1996