## **HYOWON BAN**

1250 Bellflower Blvd.
Long Beach, CA 90840
Department of Geography
California State University, Long Beach
Tel: (562) 985-7808

Fax: (562) 985-8993 Email: hyowon.ban@csulb.edu Office: PH1-206

#### **EDUCATION**

Ph.D., Geography, The Ohio State University, Columbus, OH, 2009
Dissertation Title: *Visualization of Urban Concepts in Two Directions of Thinking*Advisor: Ola Ahlqvist, Department of Geography

Master of Arts, Geography, August 2001. Ewha Womans University, Seoul, Korea.

Bachelor of Arts, Geography, February 1999. Ewha Womans University, Seoul, Korea.

#### RESEARCH INTERESTS

Geographic Information Science

- Semantic ontologies, uncertainty
- Relative motion analysis
- Cyberinfrastructure
- Geospatial web
- Spatial analytical methods

## Visual analytics

- ESDA with large data with narratives
- Information visualization

### Geovisualization

- Web-based, interactive visualization
- 2D/3D, animated mapping
- Virtual environment
- Spatio-temporal data

# Urban geography

- Urban land-use
- Exurbanization

Spatial analysis and geovisualization of Art

### **PUBLICATIONS**

### **Peer-Reviewed Journal Articles and Editorials**

Chavoshi, S.H., De Baets, B., Neutens, T., Ban, H., Ahlqvist, O., De Tré, G., and Van de Weghe, N. (2014). Knowledge Discovery in Choreographic Data Using Relative Motion Matrices and Dynamic Time Warping, *Applied Geography*, 47, 111-124.

Kim, C., Sang, S., and Ban, H. (2013). Exploring job centers by accessibility using fuzzy set approach: the case study of the Columbus MSA, *GeoJournal*, doi: 10.1007/s10708-013-9501-2.

Ahlqvist, O. Harvey, F., Ban, H., Chen, W., Fontanella, S., Guo, M., and Singh, N. (2011). Making journal articles 'live': turning academic writing into scientific dialog. *GeoJournal*, DOI 10.1007/s10708-011-9431-9. (editorial).

- Ahlqvist, O., Ban, H., Cressie, N., and Zuniga-Shaw, N. (2010). Statistical counterpoint: Knowledge discovery of choreographic information using spatio-temporal analysis and visualization. *Applied Geography*, doi:10.1016/j.apgeog.2010.03.006.
- Ban, H. and Ahlqvist, O. (2010). User evaluation of a software interface for geovisualization and communication of uncertain urban ontologies. *Journal of Information Technology in Construction (ITcon)*, 15, 122-131, <a href="http://www.itcon.org/2010/9">http://www.itcon.org/2010/9</a>.
- Ban, H. and Ahlqvist, O. (2009). Representing and Negotiating Uncertain Geospatial Concepts Where are the exurban areas?. *Computers, Environment and Urban Systems*, 33, 233-246, doi:10.1016/j.compenvurbsys.2008.10.001.
- Ahlqvist, O. and Ban, H. (2007). Categorical Measurement Semantics: A New Second Space for Geography. *Geography Compass*, 1(3), 536-555.
- Sung, H.-H., Ryu, J., and Ban, H. (2002). A Study on the Geomorphological Characteristics of Environmental Management in Watershed. *Journal of the Korean Society for Geo-Spatial Information System*, 10(4), 17-30.

## Papers in Conference Proceedings (peer-reviewed)

- Ban, H. (2011). Geographical Counterpoint of Spatio-Temporal Data, the Dance. In: *Proceedings of the 25th International Cartographic Conference*. International Cartographic Association, Paris, 2011, ISBN 978-1-907075-05-6, CO-211.
- Ban, H. and Ahlqvist, O. (2009). User Evaluation of a Software Interface for Communication in Urban Ontologies. In: J. Teller; A.-F. Cutting-Decelle; R. Billen (Eds.) *Urban Ontologies for an Improved Communication in Urban Development Projects*. Les Editions de l'Université de Liège, Belgium, 2009, ISBN 978-2-87456-082-8, 1-11.
- Ban, H. and Ahlqvist, O. (2008). Web-based Interactive Visualization of Uncertain Concepts in Urban Ontologies. In: J. Teller; C. Tweed; G. Rabino (Eds.) *Conceptual Models for Urban Practitioners*. Società Editrice Esculapio, Bologna, 2008, ISBN 88-7488-208-4, 57-68.
- Ban, H. and Ahlqvist, O. (2007). Visualizing the Uncertainty of Urban Ontology Terms. *Ontologies for Urban Development: Studies in Computational Intelligence*, 61, 85-94.

### **Extended Abstracts in Conference Proceedings (peer-reviewed)**

- Chavoshi, H., De Baets, Neutens, Ban, H., De Tre, G., and Van de Weghe, N. (2013).

  Extended abstract. Analysis and Visualization of Movement: Application to Dance.

  Workshop on Analysis & Visualization of MOVEment: Focus on Tangible Results.

  COST IC0903 MOVE meeting, HafenCity University, Hamburg, Germany, March 4-5,
  2013 (http://users.ugent.be/~schavosh/MOVE.pdf).
- Ban, H. (2012). Extended abstract, RElative MOtion (REMO) analysis of dance. *Extended Abstracts: Proceedings*, 7<sup>th</sup> International Conference on Geographic Information Science, Columbus, OH, U.S.A., September 18-21, 2012. <a href="http://www.giscience.org/past/2012/proceedings/abstracts/giscience2012\_paper\_159.pdf">http://www.giscience.org/past/2012/proceedings/abstracts/giscience2012\_paper\_159.pdf</a>

- Palazzi, M., Zuniga Shaw, N., Forsythe, W., Lewis, M., Albright, B., Andereck, M.,
  Bhatawadekar, S., Ban, H., Calhoun, A., Drozd, J., Fry, J., Quintanilha, M., Reed, A.,
  Schroeder, B., Skove, L., Thorndike, A., Twohig, M., Ahlqvist, O., Chan, P., Cressie,
  N., Turk, S., Johnson, J., Roman, C., Waterhouse, E., Haggard, P., and Noe, A. (2009).
  Extended abstract, Synchronous Objects for One Flat Thing, reproduced, SIGGRAPH
  '09 ACM SIGGRAPH 2009 Art Gallery, 37, ACM New York, NY,
  doi: 10.1145/1667265.1667306.
- Ban, H. (2006). Extended abstract, 3D Visualization of the Semantic Uncertainty of Exurban Boundaries. *IFGIprints: Geographic Information Science*, 28, 223-228, Institute for Geoinformatics, University of Münster, Germany.

## **Book Reviews (peer-reviewed)**

Ban, H. (2012). Book review, The Exposed City: Mapping the urban invisibles. *Emotion, Space and Society*, DOI: 10.1016/j.emospa.2012.06.002.

### **Other Publications**

- Sung, H.-H., Kim, D.S., Park, S.C., Ban, H., Yoon, O.K., Lee, K.S., Lee, S.T., Jang, E.M., and Han, H.C. (2012). Final project report. Investigation of Undersea-Feature Names. Prepared for Korea Hydrographic and Oceanographic Administration, Ministry of Land, Transportation And Maritime Affairs, Republic of Korea.
- Ban, H. (2001). A Study on the Geomorphological Characteristics of Development and Flood Hazards in Watershed. *Nokwooheobo* (Thesis Series of the Department of Social Studies, Ewha Womans University), Seoul: Ewha Womans University Press.

### WORK IN PROGRESS

- Ban, H. and Sung, H.H. Geovisualization of uncertain undersea-feature names (draft), in preparation.
- Ban, H. and Park, Sunook. Artistic representation of geology and land-use of urban areas (draft), in preparation.
- Ban, H. and Ahlqvist, O. Geographical Counterpoint of RElative Motion (REMO) of Choreographic Information (draft), in preparation.
- Ban, H. Geovisualization of Spatio-Temporal Data of Art (draft), in preparation.
- Ban, H. Web-based interactive visualization of uncertain exurban concepts in Southern California (draft), in preparation.

#### **POSITIONS**

**Assistant Professor**Department of Geography, The California State University, Long Beach, CA

Long Beach, CA

**Graduate Teaching Associate**Department of Geography, The Ohio State University

2006-2009
Columbus, OH

Graduate Research Associate2005-2006Center for Urban and Regional Analysis (CURA),Columbus, OH

The Ohio State University

**Instructor/Technical Support Engineer/Assistant Manager**ESRI Korea, Inc.
2001-2004
Seoul, Korea

**Graduate Research Associate**Department of Social Studies, Ewha Womans University

Seoul, Korea

Graduate Teaching Associate 2000

Department of Social Studies, Ewha Womans University Seoul, Korea

**GIS Analyst/Programmer** 1996-1998 Department of Social Studies, Ewha Womans University Seoul, Korea

#### **COURSES TAUGHT**

## California State University, Long Beach

GEOG 280 Introduction to Geospatial Techniques, Spring 2013 and Fall 2013.

GEOG 380 Map Interpretation and Analysis, Fall 2009, Spring 2010, Fall 2010, Spring 2011, Fall 2011, Spring 2012, Fall 2012, Spring 2013, Spring 2014.

GEOG 482 Map Design Presentation and GIS, Fall 2009, Fall 2010, Fall 2011, Fall 2012, Fall 2013.

GEOG 484/584 Advanced Concepts in Presentation Cartography, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014.

GEOG 488/588 Advanced Topics in Geographic Information Science, Spring 2010, Fall2011.

GEOG 497 Directed Studies, Spring 2011-present.

GEOG 680 Seminar in Geospatial Science - GIScience and Geovisualization: Spring 2012 Spring 2013.

GEOG 697 Directed Studies, Spring 2011-present.

GISC 603 Cartographic Visualization, Fall 2013.

### **GRANTS AND AWARDS**

#### **External Grants**

**Co-PI**: Investigation of Undersea-Feature Names. (April 2012~October 2012). With Drs. Hyo Hyun Sung (PI), Eunmi Jang (Co-PI), Dongsoo Kim (Co-PI), Kiseok Lee (Co-PI), Sangtae Lee (Co-PI), Hyunchul Han, Sucheol Park, and Okgyung Yoon (Co-PI). Funded by The Ministry of Land, Transport and Maritime Affairs, South Korea (about \$264,000).

#### **Internal Grants**

- **Co-PI**: Proposal for Professional Science Masters in Geographic Information Science (PSM MGSci) Program. With Drs. Suzanne Wechsler (PI), Christopher Lee (Co-PI), Jacqueline Mills (Co-PI), and Christine Rodrigue (Co-PI). Funded by CSULB (\$50,000).
- Faculty Release Time granted for Spring 2011: Preparation and Enhancement of PSM MGSci Program. Funded by The College of Continuing and Professional Education, CSULB.

#### **Awards**

- Travel Grant, The US National Committee (USNC) of the International Cartographic Association (ICA) for 25<sup>th</sup> International Cartographic Conference, The Cartography and Geographic Information Society (CaGIS), 2011.
- UCGIS / ESRI Junior Scholar Award, University Consortium for Geographic Information Science (UCGIS) Summer Assembly, UCGIS, 2010.
- Second Place Prize, Cyberinfrastructure Specialty Group Student Honors Paper Competition, The Association of American Geographers, 2009.
- Pixoneer Scholarship Awards, 1<sup>st</sup> Pixoneer Scholarship Awards KAGES Meeting and Conference, Korean-American Association for Geospatial and Environmental Sciences (KAGES), 2009.
- Second Place Prize, Cartography Specialty Group Student Honors Paper Competition, The Association of American Geographers, 2008.
- EPI PhD Dissertation Proposal Summer Research Grants, The Environmental Policy Initiative (EPI), The Ohio State University, 2007.
- Full Travel Grant, The COST C21 Conference, European Cooperation in the field of Scientific and Technical Research (COST) Office, European Science Foundation, 2009.
- Full Travel Grant, 2<sup>nd</sup> COST C21 Workshop, European Cooperation in the field of Scientific and Technical Research (COST) Office, European Science Foundation, 2007.
- Full Travel Grant, 1<sup>st</sup> COST C21 Workshop, European Cooperation in the field of Scientific and Technical Research (COST) Office, European Science Foundation, 2006.

### **INVITED LECTURES**

- Ban, H. (2011). Recent Trends and Future Prospective of GIS Research in Geography Discipline. Department of Social Studies, Ewha Womans University, 1, June, 2011, Seoul, Korea.
- Ban, H. (2011). Visualization of Spatio-Temporal Information Represented as Art. Department of Social Studies, Ewha Womans University, 8, June, 2011, Seoul, Korea.
- Ban, H. (2011). Visualization of Uncertain Urban Spatial Concept. Department of Geo-Informatics, University of Seoul, 14, June, 2011, Seoul, Korea.

## INVITED PARTICIPATION AT WORKSHOPS AND CONFERENCES

Opening Plenary Speaker, Third Annual Los Angeles Geospatial Summit, 2013.

Invited Participant, 25<sup>th</sup> International Cartographic Conference, 2011.

- Invited Participant, COST Action C21 Conference. "User Evaluation of a Software Interface for Communication in Urban Ontologies", 2009.
- Invited Participant, 2<sup>nd</sup> Workshop of COST Action C21. "Urban Ontologies for an Improved Communication in Urban Civil Engineering Projects", 2007.
- Invited Participant, 1<sup>st</sup> Workshop of COST Action C21. "Ontologies for Urban Development: Interfacing Urban Information Systems", 2006.

Invited Participant, Geographic Information Science: 4<sup>th</sup> International Conference, GIScience, 2006.

## **PRESENTATIONS**

- Chavoshi, H., De Baets, Neutens, Ban, H., De Tre, G., and Van de Weghe, N. (2013). Analysis and Visualization of Movement: Application to Dance. Workshop on Analysis & Visualization of MOVEment: Focus on Tangible Results. COST IC0903 MOVE meeting, HafenCity University, Hamburg, Germany, March 4-5, 2013.
- Ban, H. (2013). Representation of spatio-temporal information. Third Annual Los Angeles Geospatial Summit, Opening Plenary, The Japanese American National Museum, Los Angeles, CA, U.S.A., 8, February, 2013.
- Ban, H. (2012). RElative MOtion (REMO) analysis of dance. 7<sup>th</sup> International Conference on Geographic Information Science, Columbus, OH, U.S.A., 18-21 September, 2012.
- Sung, H.H. and Ban, H. (2012). Semantic uncertainty of concepts in generic name of undersea features. 32nd International Geographical Congress (IGC) Cologne, 26-30 August 2012.

- Ban, H. (2012). Knowledge discovery of choreographic information by statistical counterpoint. 107<sup>th</sup> Annual Meeting of The Association of American Geographers, 24-28 February, 2012, New York, NY, U.S.A.
- Ban, H. (2011). Geographical Counterpoint of Spatio-Temporal Data, the Dance. 25<sup>th</sup> International Cartographic Conference, 3-8 July, 2011, Paris, France.
- Ban, H. and Ahlqvist, O. (2011). Geographical Counterpoint: Understanding Choreographic Information Using Spatio-Temporal Analysis and Geovisualization. 107<sup>th</sup> Annual Meeting of The Association of American Geographers, 12-16 April, 2011, Seattle, WA, U.S.A.
- Ban, H. and Ahlqvist, O. (2010). Representing and negotiating uncertain geospatial concepts. 2010 UCGIS Summer Assembly, 15-16 June, 2010, Hilton Head Island, SC, U.S.A.
- Ban, H. and Ahlqvist, O. (2010). Multi-group user evaluation of interactive geovisualization tool for communication of uncertain urban ontologies. 106<sup>th</sup> Annual Meeting of The Association of American Geographers, 14-18 April, 2010, Washington, D.C., U.S.A.
- Ban, H. (2009). Art and Science Together Again: What Do Geography and Choreography Tell Each Other?. 105<sup>th</sup> Annual Meeting of The Association of American Geographers, 22-27 March, 2009, Las Vegas, NV, U.S.A.
- Ban, H. and Ahlqvist, O. (2009). Representing and Negotiating Uncertain Exurban Concepts with User Evaluation. 105<sup>th</sup> Annual Meeting of The Association of American Geographers, 22-27 March, 2009, Las Vegas, NV, U.S.A.
- Ban, H. and Ahlqvist, O. (2009, presented by Ahlqvist, O.). User Evaluation of a Software Interface for Communication in Urban Ontologies. COST Action C21 Conference, "Ontologies for urban development: Future development of urban ontologies", 9-10 March, 2009, Université de Liège, Belgium.
- Ban, H. (2008). Web-based Interactive Visualization of Different Definitions of Exurban Areas. 104<sup>th</sup> Annual Meeting of The Association of American Geographers, 15-19 April, 2008, Boston, MA, U.S.A.
- Ban, H. and Ahlqvist, O. (2007). Web-based Interactive Visualization of Uncertain Concepts in Urban Ontologies. 2<sup>nd</sup> Workshop of COST Action C21. "Urban Ontologies for an improved communication in urban civil engineering projects", 17-18 October, 2007, Castello del Valentino, Torino, Italy.
- Ban, H. (2007). Visualizing Difference and Similarity between Definitions of Exurban Areas. 103<sup>rd</sup> Annual Meeting of The Association of American Geographers, 16-21 April, 2007, San Francisco, CA, U.S.A.
- Ban, H. and Ahlqvist, O. (2006). Visualizing the Uncertainty of Urban Ontology Terms. 1<sup>st</sup> Workshop of COST Action C21. "Ontologies for Urban Development: Interfacing Urban Information Systems", 6-7 November, 2006, University of Geneva, Switzerland.

- Ban, H. (2006). 3D Visualization of the Semantic Uncertainty of Exurban Boundaries. Geographic Information Science: 4<sup>th</sup> International Conference, GIScience 2006, 20-23 September, 2006, Münster, Germany.
- Ban, H. (2006). Visualizing Different Definitions of Exurban Areas. 102<sup>nd</sup> Annual Meeting of The Association of American Geographers, 7-11 March, 2006, Chicago, IL, U.S.A.
- Ban, H. (2005). A Study on the Geomorphological Characteristics of Development and Flood Hazards in Watershed using Geographic Information System: Northwest region in Yongin city, Republic of Korea. 101<sup>th</sup> Annual Meeting of The Association of American Geographers, 5-9 April, 2005, Denver, CO, U.S.A.

### **PROFESSIONAL MEETINGS**

- Project meeting, REMO Analysis and 3D geovisualization of Samba dance. 7 January, 2013, Department of Geography, Ghent University, Belgium.
- Project meeting, Analysis and visualization of dance with music. 8 January, 2013. Institute for Psychoacoustics and Electronic Music (IPEM), Ghent University, Belgium.

### **EXHIBITIONS OR SHOWS**

- Synchronous Objects, Reproduced. 2010 International Symposium on Electronic Art (ISEA2010 RUHR), 20–29 August, 2010, Dortmund, Essen and Duisburg, Germany (participant of the project team).
- Synchronous Objects for One Flat Thing, reproduced. The 36<sup>th</sup> International Conference and Exhibition on Computer Graphics and Interactive Techniques (SIGGRAPH'09): The Information Aesthetics Showcase Exhibition, 4-6 August, 2009, Ernest N. Morial Convention Center, New Orleans, Louisiana, U.S.A. (participant of the project team).
- Charles Helm/Wexner Center for the Arts. Object designer. William Forsythe: Transfigurations. Sponsored by: National Endwoment for the Arts, New England Foundation for the Arts, Battelle Endowment for Technology and Human Affairs, Wexner Center for the Arts, Columbus, Ohio, USA. April 02, 2009 July 26, 2009. wexarts.org.
- William Forsythe Symposium: Choreographic Objects. 1 Aprill, 2009, Wexner Center for the Arts (pannel and participant of the project team).

## MULTIMEDIA, DATABASES, AND WEBSITES

Ban, H., creator. (2009). pinu (program for identification and negotiation of uncertain concept definitions). Internet. Advanced Computing Center for the Arts and Design, The Ohio State University. http://accad.osu.edu/~hban/pinu.

- Ban, H., Cressie, N., and Ahlqvist, O., creator. (2009). Statistical counterpoint. Internet. The Ohio State University, The Forsythe Company, The Forsythe Foundation, OSU Office of Research, Rotterdamse Dansacademie/Codarts, Tanzplan Deutschland. http://synchronousobjects.osu.edu/content.html#/statisticalCounterpoint.
- Ahlqvist, O. and Ban, H., co-creator. (2009). Movement Density. The Ohio State University, The Forsythe Company, The Forsythe Foundation, OSU Office of Research, Rotterdamse Dansacademie/Codarts, Tanzplan Deutschland. http://synchronousobjects.osu.edu/content.html#/movementDensity.

#### **MEDIA**

- Inside CSULB (May 1, 2014): "A Calliope Collaboration": interview (http://www.csulb.edu/misc/inside/?p=46183)
- Beach TV CSULB (March 10, 2014): "CSULB Talking Points Dr. Paul Laris": geovisualization works (<a href="http://www.youtube.com/watch?v=IiHgzBEqkCg">http://www.youtube.com/watch?v=IiHgzBEqkCg</a>)
- MBC America (February 8, 2013): "Job Workshop of CSULB KISA": interview

#### PAST TEACHING EXPERIENCE

- Geography 200 World Regional Geography, Teaching assistant and Guest lecturer, The Ohio State University, Winter 2008, Autumn 2006.
- Geography 580 Elements of Cartography, Lab instructor and Guest lecturer, The Ohio State University, Autumn 2008, Spring 2009.
- Geography 597.01 World Urbanization, Lab instructor, The Ohio State University, Autumn 2007, Spring 2007.
- Geography 607 Fundamentals of Geographic Information Systems, Lab instructor and Guest lecturer, The Ohio State University, Spring 2008.
- Geography 680 Numerical Cartography, Lab instructor, The Ohio State University, Winter 2007 / Guest lecturer, Spring 2008.
- Geography 685 Intermediate Geographical Information Systems, Lab instructor and Guest lecturer, The Ohio State University, Winter 2009 / Guest lab instructor, Spring 2007.

Introduction to ArcGIS, ESRI Korea, Inc., 2002-2004, Instructor.

Introduction to ArcIMS, ESRI Korea, Inc., 2002-2004, Instructor

Concepts of GIS and the application, Ewha Womans University, 2000, Lab instructor.

Introduction to Cartography, Ewha Womans University, 1998, Guest lab instructor.

### PAST RESEARCH EXPERIENCE

- Geographic Applications and Statistical Counterpoint of Synchronous Objects project,
  The Forsythe Company and The Advanced Computing Center for the Arts and Design
  (ACCAD), The Ohio State University, 2008-2009.
  Supervisors: Ola Ahlqvist, Department of Geography; Maria Palazzi, ACCAD; Norah
  Zuniga-Shaw, Department of Dance, ACCAD; Noel Cressie, Department of Statistics.
- Interactive 3D Visualization of Uncertainty in Exurban Spaces and Concepts, Department of Geography, The Ohio State University, 2007.

  Supervisor: Ola Ahlqvist, Department of Geography.
- Multiscale Exurban Land Markets in Ohio, Graduate Research Associate, Center for Urban and Regional Analysis (CURA), The Ohio State University, 2005-2006. Supervisor: Darla Munroe, Department of Geography.
- Web-based Student Lodging Information System around Ewha Womans University II, Graduate Research Associate, Department of Social Studies, Ewha Womans University, 2001. Supervisor: Hyo-Hyun Sung, Department of Social Studies.
- Virtual Ideal-Space System around Ewha Womans University, Graduate Research Associate, Department of Social Studies, Ewha Womans University, 2000. Supervisor: Hyo-Hyun Sung.
- Commercial Information System around Ewha Womans University, Graduate Research Associate, Department of Social Studies, Ewha Womans University, 2000. Supervisor: Hyo-Hyun Sung.
- Information System for Buddhist Temple in Korea, Department of Social Studies, Graduate Research Associate, Ewha Womans University and Department of Geography Education, Dongguk University, 1999.

  Supervisor: Hyo-Hyun Sung.
- Development of a Web-site for Middle school students' Education, Graduate Research Associate, Korea Education & Research Information Services and Ewha Womans University, 1999. Supervisor: Hyo-Hyun Sung.
- Study of Standard Model and Synthetic Program Development for Social Environmental Curriculum, Research Assistant, Department of Social Studies, Ewha Womans University, 1999. Supervisor: Hyo-Hyun Sung.
- Study on the Series of GIS Case Studies, Research Assistant, Department of Social Studies, Ewha Womans University, 1999. Supervisor: Hyo-Hyun Sung.
- Standardization of Terminology of Geography Information, Research Assistant, Department of Social Studies, Ewha Womans University, 1999.

  Supervisor: Hyo-Hyun Sung.

Web-based Student Lodging Information System around Ewha Womans University I, Research Assistant, Department of Social Studies, Ewha Womans University, 1999. Supervisor: Hyo-Hyun Sung.

Cultural Information Management System of Electronic Cultural Atlas Initiative (ECAI) Korea, Research Assistant, Ministry of Culture & Tourism Republic of Korea and Department of Social Studies, Ewha Womans University, 1997. Supervisor: Hyo-Hyun Sung.

Student Lodging Information System around Ewha Womans University, Research Assistant, Department of Social Studies, Ewha Womans University, 1997. Supervisor: Hyo-Hyun Sung.

Development of Department Website, Programmer and webmaster, Department of Social Studies, Ewha Womans University, 1997.
Supervisor: Hyo-Hyun Sung.

Digital Seoul: Making a Digitalized Topographical Map in Seoul Area, Research Assistant, Department of Social Studies, Ewha Womans University, 1996. Supervisor: Hyo-Hyun Sung.

Development of a Model for Educational Information Using GIS, Research Assistant, The Global Youth Network and Department of Social Studies, Ewha Womans University, 1996. Supervisor: Hyo-Hyun Sung.

## **SERVICE**

#### **Peer Reviews**

International Journal of Geospatial and Environmental Research, 2014 (manuscript).

Applied Geography, 2014 (manuscript).

Transactions in GIS, 2014 (manuscripts).

International Journal of Applied Geospatial Research, 2011 (manuscript).

GeoJournal, 2011 (manuscript).

Cartography and Geographic Information Science (CaGIS), 2009 (manuscript).

# Department of Geography, California State University, Long Beach

Undergraduate Advisor, Spring 2014 - present.

GIS Certificate Advisor, Spring 2013 - present.

Graduate Advisor, Spring 2012 - Fall 2012.

Organizer, Student Paper Clinic, Spring 2010 - present.

## California State University, Long Beach

Advisor of CSULB Korean International Student Association (KISA), 2011 – present.

Member of the East Asia Subcommittee of the International Education Committee, CSULB, 2012 – present.

## **External Organization**

Technical Director and Webmaster, Korean-American Association for Geospatial and Environmental Sciences (KAGES, http://www.kages.org/), 2011 - present.

Member, Korean-American Scientists and Engineers Association (KSEA, <a href="http://ksea.org/">http://ksea.org/</a>), 2009 - present.

Co-advisor, KSEA Long Beach Chapter, 2013 - present.

Guest speaker, Korean Women's International Network Orange County (KOWIN-OC) Youth Mentoring Conference for Girls, March 23, 2013.

Award Committee, Pixoneer Scholarship Awards, Korean-American Association for Geospatial and Environmental Sciences (KAGES), 2010 - 2011.

Representative, California State University System, 2010 UCGIS Summer Assembly, 2010.

### MEMBERSHIP AT PROFESSIONAL SOCIETIES

Member, Korean-American Scientists and Engineers Association (KSEA), 2011-present.

Member, California Faculty Association (CFA, <a href="http://www.calfac.org">http://www.calfac.org</a>), 2009-present.

Member, California Map Society (CMS, <a href="http://californiamapsociety.org/">http://californiamapsociety.org/</a>), 2009-present.

Member, Cyber Infrastructure Specialty Group (CISG), AAG, 2008-present.

Member, Cartography Specialty Group (CSG), AAG, 2006-present.

Member, Association of American Geographers (AAG), 2004-present.

### ADMINISTRATIVE EXPERIENCE

Mentor, Mentorship Program for New Graduate Students, Geography Graduate Organization (GGO), Department of Geography, The Ohio State University, 2008-2009.

Volunteer, Student Recruitment Weekend, Department of Geography, The Ohio State University, 2007-2009.

Homepage Consultant, Geography Graduate Organization (GGO), Department of Geography, The Ohio State University, 2005-2006.

Assistant Manager in Technical Support of ESRI products, ESRI Korea, Inc., 2001-2004.

Product Manager of ArcWeb Services, ESRI Korea, Inc., 2003-2004.

Graduate Technical Associate, GIS Laboratory, Department of Social Studies, Ewha Womans University, 1999- 2001.

### **SKILLS**

## GIS & Remote Sensing (RS) Software

ArcGIS, ArcInfo Workstation, ArcScene, ArcView, ArcIMS, ArcPad, ArcPad Studio, MapObjects, ArcObjects, ArcGIS Server, ArcWeb Services, ArcSDE, IDRISI, MapInfo Professional, MapXtreme, MapX, Auto CAD, ERDAS Imagine, ER Mapper, and ICube

### **Geovisualization Hardware**

GeoWall Set

## **Virtual-Environment Development Software**

3DVIA Virtools, Google Earth, Google Sketchup

## Statistics/Visual Analyticis Software

R, RGGobi, GGobi, WinBugs, SPSS, GeoDa, GeoViz Toolkit

## **GPS Hardware**

Trimble GPS, Garmin GPS

## Mobile Hardware for field work with GPS

PDA. Tablet PC

### **Development Languages**

Python, ActionScript, JavaScript, HTML, VRML, XML, KML, GML, Visual Basic, ASP, JSP

### **Web Development Software**

Flash, Dream Weaver, FrontPage, HotDog, Namo Web Editor

## **Computer Graphics Software**

Adobe Photoshop, Adobe Illustrator, Adobe Premier, Adobe AfterEffects, Corel Paint Shop Pro, Autodesk Maya, CamStudio, Windows Movie Maker

## **Database Management System**

Oracle, SQL, MS Access

#### Others

MicroSoft Office, Windows, Linux, Unix, MS-DOS, Mac OS

(Last updated on May 2, 2014)