

HYUNGGU JUNG

4005 15th Ave NE Apt 307
Seattle, WA 98105, USA

Phone: (650) 646-5505
<http://students.washington.edu/hyunggu/>

RESEARCH INTERESTS

Health Informatics, Human-Computer Interaction, Decision-Making, Visual Analytics, Social Computing, Assistive Technologies, Data-Driven Design, Data Science

EDUCATION

- University of Washington School of Medicine** Seattle, WA
Ph.D. in Biomedical and Health Informatics *Dec. 2017*
 • Thesis: Creating a smartphone application for image-assisted dietary assessment among older adults with type 2 diabetes
- Stanford University** Stanford, CA
M.S. in Computer Science *June 2012*
 • Specialized Area: Human-Computer Interaction
- University of Waterloo** Waterloo, ON Canada
M.Math in Computer Science *Aug. 2010*
 • Thesis: Reasoning about benefits and costs of interaction with users in real-time decision making environments with application to healthcare scenarios
- Korea Advanced Institute of Science and Technology (KAIST)** Daejeon, Korea
B.S. in Computer Science with a minor in Business Economics *Aug. 2008*

PROFESSIONAL EXPERIENCE

- Predocctoral Research Associate, University of Washington** Seattle, WA
Department of Radiation Oncology *Oct. 2017 - Dec. 2017*
 • Developed probabilistic-based systems designed to perform automated quality assurance checks on radiation therapy plans
 • Advisor: Dr. Alan Kalet
- Department of Human Centered Design and Engineering* *Sep. 2016 - Sep. 2017*
 • Developed the system that supports theoretical models for computer-supported cooperative work
 • Advisors: Drs. Mark R. Zachry and David W. McDonald
- Department of Biomedical Informatics and Medical Education* *Sep. 2014 - Aug. 2016*
 • Developed a Markov chain model for the prediction of head and neck squamous cell carcinoma dissemination
 • Advisor: Dr. Mark M. Whipple
- Research Intern, PARC, a Xerox Company** Palo Alto, CA
Computer Science Laboratory *June 2015 - Sep. 2015*
 • Developed and evaluated contextual intelligence (CI) technology using text classification and information extraction to support rules for facilitating peer-to-peer exchanges
 • Advisor: Dr. Victoria Bellotti
- Research Assistant, University of Washington** Seattle, WA
Institute of Translational Health Sciences *July 2014 - Sep. 2014*
 • Developed an interactive demographic visualization of multiple facilities across time. Led the design studio for redesigning a data-profiling tool gathering and presenting distributed data
 • Advisor: Dr. Kari A. Stephens
- Center for Game Science* *Oct. 2013 - June 2014*
 • Developed a visual analytics tool for discovering and analyzing raw data. Developed a tool for grading equations by crowdsourcing through Amazon Mechanical Turk
 • Advisor: Christy Ballweber
- Research Intern, Microsoft Research** Redmond, WA
Natural Interaction Research Group *June 2013 - Sep. 2013*
 • Developed a visual analytics tool for assessing attention during lectures and presentations. Conducted a user interface evaluation of the tool
 • Advisor: Dr. Shamsi Iqbal

Research Assistant, University of Washington*Health-E Research Group*

Seattle, WA

Sep. 2012 - June 2013

- Conducted systematic literature review on technologies for health behavior change. Designed prototypes for an interface summarizing mobility information and creating prompts or messages promoting health behavior change
- Advisor: Dr. George Demiris

Research Assistant, Stanford University*Stanford HCI Group*

Stanford, CA

Oct. 2011 - Dec. 2011

- Developed a mobile application to encourage people to increase physical activity. Gathered raw data from users and transferred them to the database
- Advisor: Dr. Scott Klemmer

*Stanford Center for Biomedical Informatics Research**Sep. 2010 - Aug. 2011*

- Developed a tool generating a consolidated guideline for physicians as part of GLINDA project
- Advisor: Dr. Mark A. Musen

Research Assistant, University of Waterloo*Artificial Intelligence Research Group*

Waterloo, ON Canada

Sep. 2008 - Aug. 2010

- Developed an algorithm modeling a communication and information system for emergency medical staff, focusing on finding the right doctor in hospital emergency settings with real-time aspects and dynamic environments
- Advisor: Dr. Robin Cohen

Unix Consultant, University of Waterloo*Math Faculty Computing Facility (MFCF) Help Center*

Waterloo, ON Canada

May 2009 - Apr. 2010

- Provided support to undergraduate students, graduate students and professors to use Waterloo's computer infrastructure by responding to questions in a help-desk environment

Software Engineer, Brainzsquare, Inc.*Division of Desktop Management System*

Seoul, Korea

Dec. 2005 - Feb. 2006

- Developed a solution for desktop management system to control remote users' machines with Visual C++ at the IT infra-management firm

Military Service, Republic of Korea Fire and Disaster Department*Seobu Station*

Seoul, Korea

June 2003 - Sep. 2005

- Designed a fire-training simulation using a 3D Virtual Reality technique, while working for call-receiving service for 119 Rescue and First-aid Service

GRANTS, AWARDS & HONORS

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- 2016, **Graduate School Fund for Excellence and Innovation (GSFEI) Travel Awards**
2014 \$300 award/travel for attending AMIA 2014 and AMIA 2016, respectively
- 2016 **National Science Foundation (NSF) Student Travel Grant**
\$1,000 travel grant for attending ICHI 2016
- 2015 **Korean-American Scientists and Engineers Association (KSEA) & Korea-U.S. Science Cooperation Center (KUSCO) Scholarship**
\$1,000 award for academic excellence to Korean students
- 2014 **The Korean Computer Scientists and Engineers Association Scholarship**
\$200 award for academic excellence to Korean students in computer science and engineering
- 2014 **Graduate and Professional Student Senate (GPSS) Travel Grants Program**
\$300 travel grant for attending AMIA 2014
- 2012 **Korean Government Scholarship**
-2014 Scholarship (\$31,000/year, for 2 years) awarded for tuition and stipend for Ph.D studies
- 2012 **Mogam Science Scholarship**
\$10,000 award for stipend for Ph.D studies
- 2012 **Best Project Award**
1st prize on CS247 Interaction Design Studio, Stanford University

- 2012 **Outstanding Award**
\$325 award, Stanford Opportunity Job Fair Research
- 2012 **Canadian AI Travel Grant**
\$250 travel grant for attending Canadian AI 2010
- 2008 **Mathematics Graduate Experience Award**
-2010 \$1,000 award/term for 2 years, University of Waterloo
- 2008 **International Masters Student Award**
-2010 \$1,550 award/term for 2 years, University of Waterloo
- 2008 **Humanity Scholarship**
\$1,000 award, KAIST
- 2006 **Undergraduate Research Assistantships (URA) Program**
-2007 Research with a faculty member as an undergraduate research assistant, University of Waterloo
- 2006 **Overseas Study Program Scholarship**
Half tuition fee for summer session at UCSD
- 2006 **Undergraduate Research Participation (URP) Program**
\$500 award, KAIST
- 2006, **Chae-San Scholarship**
2003 Scholarship for exemplary computer science students

PUBLICATIONS

JOURNAL PAPERS

- [j.6] Stephens KA, **Jung H**, Estiri H, Fiore-Gartland B, Lee S, Chan YF, Heagerty P, Kosel A, Keppel G, Munson S, Baldwin LM. "Design Considerations for Developing Data Profiling Tools for Distributed Electronic Health Data Networks". In preparation for review at *Journal of the American Medical Informatics Association (JAMIA)*. [**Impact factor 3.428**]
- [j.5] Han K, **Jung H**, Jang J, Lee D. "Understanding Users Privacy Attitudes through Subjective and Objective Assessments: An Instagram Case Study". Submitted to the *IEEE Computer*. [**Impact factor 1.755**]
- [j.4] Peltonen LM, Alhuwail D, Ali S, Badger MK, Eler GJ, Georgsson M, Islam T, Jeon E, **Jung H**, Kuo CH, Lewis A, Pruinelli L, Ronquillo C, Sarmiento RF, Sommer J, Tayaben JL, Topaz M. "Current Trends in Nursing Informatics: Results of an International Survey". *Studies in Health Technology and Informatics*. 2016;225:938-9, June 2016. PMID: 27332419
- [j.3] Peltonen LM, Topaz M, Ronquillo C, Pruinelli L, Sarmiento RF, Badger MK, Ali S, Lewis A, Georgsson M, Jeon E, Tayaben JL, Kuo CH, Islam T, Sommer J, **Jung H**, Eler GJ, Alhuwail D. "Nursing Informatics Research Priorities for the Future: Recommendations from an International Survey". *Studies in Health Technology and Informatics*. 2016;225:222-6, June 2016. PMID: 27332195 (**Nominated for the best scientific paper top ten award list**)
- [j.2] Topaz M, Ronquillo C, Peltonen LM, Pruinelli L, Sarmiento RF, Badger MK, Ali S, Lewis A, Georgsson M, Jeon E, Tayaben JL, Kuo CH, Islam T, Sommer J, **Jung H**, Eler GJ, Alhuwail D. "Advancing Nursing Informatics in the Next Decade: Recommendations from an International Survey". *Studies in Health Technology and Informatics*. 2016;225:123-7, June 2016. PMID: 27332175
- [j.1] Cohen R, **Jung H**, Fleming M, Cheng MYK. "A User Modeling Approach for Reasoning about Interaction Sensitive to Bother and Its Application to Hospital Decision Scenarios". *Special Issue on Personalization in e-Health User Modeling and User-Adapted Interaction (UMUAI): Volume 21, Issue 4 (2011)*, pp. 441-484, October 2011. DOI: 10.1007/s11257-010-9091-3 (**Corresponding author**). [**Impact factor 3.625**]

CONFERENCE PAPERS

- [c.18] Seo W, **Jung H**. "Exploring the Community of Blind or Visually Impaired People on YouTube". In *Proceedings of the 19th ACM SIGACCESS Conference on Computers and Accessibility (ASSETS)*. Association for Computing Machinery (ACM), Baltimore, MD, October 2017. DOI: 10.1145/3132525.3134801

- [c.17] **Jung H**, Seo W, Cha M. “Personas and Scenarios to Design Technologies for North Korean Defectors with Depression”. In *Companion of the 20th ACM Conference on Computer-Supported Cooperative Work and Social Computing* (pp. 215-218). ACM, Portland, OR, February 2017. DOI: 10.1145/3022198.3026308
- [c.16] Abdulwahhab O, **Jung H**. “Designing Community of Practice Systems: a Value Sensitive Approach”. In the *IEEE International Conference on Informatics, Health, & Technology* (pp. 1-7), Riyadh, Saudi Arabia, February 2017. DOI: 10.1109/ICIHT.2017.7899005
- [c.15] **Jung H**, Law A, Grunblatt E, Wang LL, Kusano A, Mejino Jr. JLV, Whipple ME. “Development of a Novel Markov Chain Model for the Prediction of Head and Neck Squamous Cell Carcinoma Dissemination”. In *AMIA Annual Symposium Proceedings. American Medical Informatics Association*, 2016 Nov;2016:1832-39, Chicago, IL, November 2016. PMID: 28269942
- [c.14] Topaz M, Ronquillo C, Peltonen LM, Pruinelli L, Sarmiento RF, Badger MK, Ali S, Lewis A, Georgsson M, Jeon E, Tayaben JL, Kuo CH, Islam T, Sommer J, **Jung H**, Eler GJ, Alhuwail D, Lee YL. “Nurse Informaticians Report Low Satisfaction and Multi-level Concerns with Electronic Health Records: Results from an International Survey”. In *AMIA Annual Symposium Proceedings. American Medical Informatics Association*, 2016 Nov;2016:2016-25, Chicago, IL, November 2016. PMID: 28269961.
- [c.13] **Jung H**, Law A, Wu E, Whipple ME. “Coordinated Markov Modeling of Cancer Metastasis from Multiple Primary Sites”. In *Proceedings of the Conference of the Asia Pacific Association for Medical Informatics*, Seoul, Korea, November 2016.
- [c.12] **Jung H**, Lee J. “Development of a Medication Information Generator System for Older Adults”. *2016 IEEE International Conference on Healthcare Informatics (ICHI)*, Chicago, IL, USA, October 2016, p. 312. DOI: 10.1109/ICHI.2016.54
- [c.11] Lee S, **Jung H**. “Mutiv: Music-based Mobile Application to Support Joggers”. *2016 IEEE International Conference on Healthcare Informatics (ICHI)*, Chicago, IL, USA, October 2016, p. 411. DOI: 10.1109/ICHI.2016.75
- [c.10] Law AB, **Jung H**, Wang LL, Kusano A, Whipple ME. “A Model of Regional Tumor Metastasis of Squamous Cell Carcinoma of the Tongue”. In *Proceedings of the American Head and Neck Society (AHNS) 9th International Conference on Head and Neck Cancer*, Seattle, WA, July 2016.
- [c.9] **Jung H**, Bellotti V, Doryab A, Leitersdorf D, Chen J, Hanrahan B, Lee S, Turner D, Dey A, Carroll JM. “MASTerful’ Matchmaking in Service Transactions: Inferred Abilities, Needs and Interests versus Activity Histories”. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 1644-1655). Association for Computing Machinery (ACM), San Jose, CA, May 2016. DOI: 10.1145/2858036.2858263. [Acceptance rate: 23% (565/2435)]
- [c.8] Wang LL, Grunblatt E, **Jung H**, Kalet IJ, Whipple ME. “Biological Model Development as an Opportunity to Provide Content Auditing for the Foundational Model of Anatomy Ontology”. In *AMIA Annual Symposium Proceedings. American Medical Informatics Association*. 2015 Nov 5;2015:2111-20, San Francisco, CA, November 2015. PMID: 26958311
- [c.7] **Jung H**, Hong SR, Meas P, Zachry M. “Designing Tools to Support Advanced Users in New Forms of Social Media Interaction”. In *Proceedings of the 33rd Annual International Conference on the Design of Communication (SIGDOC '15) Article 34. Association for Computing Machinery (ACM)*, Limerick, Ireland, July 2015. DOI: 10.1145/2775441.2775462
- [c.6] Stephens KA, Lee ES, Estiri H, **Jung H**. “Examining Researcher Needs and Barriers for using Electronic Health Data for Translational Research”. In *AMIA Joint Summits Translational Science Proceedings. American Medical Informatics Association*. 2015 Mar 25;2015:168-72, San Francisco, CA, March 2015. PMID: 26306262
- [c.5] Estiri H, Chan YF, Baldwin LM, **Jung H**, Cole A, Stephens KA. “Visualizing Anomalies in Electronic Health Record Data: The Variability Explorer Tool”. In *AMIA Joint Summits Translational Science Proceedings. American Medical Informatics Association*. 2015 Mar 25;2015:56-60, San Francisco, CA, March 2015. PMID: 26306237
- [c.4] **Jung H**, Lee ES, Estiri H, Stephens KA. “Interactive Demographic Visualization of Multiple Facilities across Time”. In *Proceedings of the 2014 Workshop on Visual Analytics in Healthcare (VAHC)*, Washington, D.C., November 2014.

- [c.3] **Jung H**, Lau J. “Task-Decomposing Anonymous Crowds”. In *Proceedings of the 2013 US-Korea Conference on Science, Technology and Entrepreneurship (UKC)*, East Rutherford, New Jersey, August 2013.
- [c.2] **Jung H**, Cohen R. “A Model for Reasoning about Interaction with Users in Dynamic, Time Critical Environments for the Application of Hospital Decision Making”. In *Advances in Artificial Intelligence: 23rd Canadian Conference on Artificial Intelligence, Canadian AI 2010*, Ottawa, Canada, May 31-June 2, 2010, Proceedings 2010 May 12 (Vol. 6085, pp. 319–323). Springer. DOI: 10.1007/978-3-642-13059-5_37
- [c.1] **Jung H**. “Reasoning about Interaction for Hospital Decision Making”. In *Advances in Artificial Intelligence: 23rd Canadian Conference on Artificial Intelligence, Canadian AI 2010*, Ottawa, Canada, May 31-June 2, 2010, Proceedings 2010 May 12 (Vol. 6085, pp. 414–415). Springer. DOI: 10.1007/978-3-642-13059-5_60

PRESENTATIONS

- [p.5] **Jung H**. “Creating a Smartphone Application for Image-assisted Dietary Assessment for Older Adults with Type 2 Diabetes”. Podium presented at the *American Medical Informatics Association (AMIA) Annual Symposium*, Chicago, IL, November 2016.
- [p.4] **Jung H**. “Use of Social Media for Dietary Assessment among Older Adults with Diabetes”. Podium presented at the *Workshop on Social Media for Older Adults*, Bellevue, WA, November 2016.
- [p.3] **Jung H**. “Creating a Smartphone Application for Image-assisted Dietary Assessment for Older Adults with Type 2 Diabetes”. Podium and poster presented at the *IEEE International Conference on Healthcare Informatics*, Chicago, IL, October 2016.
- [p.2] Wang LL, Grunblatt E, **Jung H**, Whipple ME, Kalet IJ. “Ontological Content Auditing during Model Creation Using the Foundational Model of Anatomy”. Poster presented at the *National Library of Medicine (NLM) Informatics Training Conference*, Bethesda, MD, June 2015.
- [p.1] **Jung H**, Cohen R. “A Model for Reasoning about Interaction with Users in Hospital Decision Scenarios”. Poster presented at *Biomedical Computation at Stanford (BCATS) 2010*, Stanford, November 2010.

INVITED TALKS

11. From Data to Decision: Improving Decision Making with Electronic Health Records Data
 - School of Human ICT Convergence, Sungkyunkwan University, Suwon, Korea Nov. 2017
 - Department of Preventive Medicine, Kyung Hee University, Seoul, Korea Nov. 2017
 - Electronics and Telecommunications Research Institute, Daejeon, Korea Nov. 2017
 - Department of Biomedical Informatics and Medical Education, University of Washington School of Medicine, Seattle, WA Oct. 2017
 - Department of Quantitative Health Sciences, University of Massachusetts Medical School, Worcester, MA Sep. 2017
 - Brown Center for Biomedical Informatics, Brown University, Providence, RI May 2017
10. ‘MASTERful’ Matchmaking in Service Transactions: Inferred Abilities, Needs and Interests versus Activity Histories
 - School of Computing, KAIST, Daejeon, Korea Nov. 2017
 - Department of Computer Science and Engineering, Seoul National University, Seoul, Korea Jan. 2017
 - School of Computer Science and Engineering, Chung-Ang University, Seoul, Korea Dec. 2016
 - School of Human ICT Convergence, Sungkyunkwan University, Suwon, Korea Dec. 2016
 - Graduate School of Convergence Science and Technology, Seoul National University, Suwon, Korea Dec. 2016
 - Department of Library and Information Science, Yonsei University, Seoul, Korea Dec. 2016
9. Creating Technologies towards Smart Health and Cyber-Human Systems
 - Department of Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO Apr. 2017

- Department of Healthcare Policy and Research, Weill Cornell Medical College, New York, NY Apr. 2017
 - Department of Informatics, New Jersey Institute of Technology, Newark, NJ Apr. 2017
 - Graduate School of Knowledge Service Engineering, KAIST, Daejeon, Korea Jan. 2017
8. Creating Tools for Visual Analytics through User-Centered Design Process
 - Institute for Biomedical Informatics, University of Pennsylvania, Philadelphia, PA Jan. 2017
 7. Needs Assessment through Personas and Scenarios
 - College of Nursing, Seoul National University, Seoul, Korea Jan. 2017
 6. Markov Modeling of Cancer Metastasis for Predicting Head and Neck Squamous Cell Carcinoma Dissemination
 - Department of Biomedical informatics, Ajou University School of Medicine, Suwon, Korea Dec. 2016
 - Biomedical Engineering Department, Seoul National University College of Medicine, Seoul, Korea Dec. 2016
 - Division of Biomedical Informatics, Seoul National University College of Medicine, Seoul, Korea Dec. 2016
 - School of Electrical Engineering, Korea University, Seoul, Korea Nov. 2016
 5. Designing Tools to Support Users with Special Needs
 - School of Human ICT Convergence, Sungkyunkwan University, Suwon, Korea Dec. 2015
 4. Designing Tools to Support Advanced Users in New Forms of Social Media Interaction
 - 16th KOCSEA Technical Symposium, Claremont, CA Dec. 2015
 3. Redesigning Tools for Supporting Clinical Researchers through User-centered Design Approach
 - School of Human ICT Convergence, Sungkyunkwan University, Suwon, Korea Dec. 2014
 - Department of Biomedical Informatics, Ajou University School of Medicine, Suwon, Korea Dec. 2014
 - College of Nursing, Seoul National University, Seoul, Korea Dec. 2014
 2. A Model for Reasoning about Interaction with Users in Dynamic, Time Critical Environments for the Application of Hospital Decision Making
 - Sharing Discovery: The 2010 Graduate Student Research Conference, University of Waterloo, Waterloo, ON Canada Apr. 2010
 1. Finding the Right Doctor in Hospital Emergency Scenarios
 - Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, ON Canada Sep. 2009

TEACHING

Writing Tutor, University of Washington

The Odegaard Writing and Research Center

Seattle, WA

Fall 2016 - Fall 2017

- Provided undergraduate and graduate students with 1:1 writing tutoring

Course Assistant, Stanford University

CS116 From Nand to Tetris

CS424M Computational Modeling and Analytics in Social Science

CS106A Programming Methodology

Stanford, CA

Spring 2012

Winter 2012

Fall 2011

- Graded assignments and held office hours to assist students with concepts

Instructor, Stanford University

Stanford Educational Studies Program

Fall 2010, Spring 2011, Fall 2011, Spring 2012

Stanford, CA

- Taught Korean language and alphabet for about 90 high school students

Teaching Assistant, University of Waterloo

CS136 Elementary Algorithm Design and Data Abstraction

CS115 Introduction to Computer Science 1

Waterloo, ON Canada

Winter 2009

Fall 2008

- Marked assignments and examinations, and proctored examinations

Instructor, Government of Grenada

Korea Internet Volunteers

St. George's, Grenada

Summer 2008

- Taught Java programming and Web design
- Received certificate of appreciation from Minister of Education of Grenada

Teaching Assistant, KAIST*BEP403 Microeconomics**CS101 Introduction to Programming*

Daejeon, Korea

*Spring 2008**Spring 2008*

- Held consulting hours to assist students with concepts
- Marked assignments and examinations, and proctored examinations

Tutor, KAIST*KAIST Tutoring Program*

Daejeon, Korea

Fall 2007 - Spring 2008

- Provided 1:1 remedial tutoring to undergraduate freshmen
- Tutored two international freshmen in CS101 Introduction to Programming (Java programming)

Instructor, De La Salle Lipa*Korea Internet Volunteers*

Lipa, Philippines

Summer 2007

- Taught MATLAB programming and conducted seminars for advanced information technology
- Received two certificates of appreciation, one from the Dean of Computer Science and another from the Dean of Tourism Department

RESEARCH MENTORING

- Woosuk Seo (Undergraduate, University of Washington) *Apr. 2017 - present*
“Understanding the Community of Blind or Visually Impaired People on YouTube”
- Woosuk Seo, Michelle Cha (Undergraduate, University of Washington) *May 2016 - present*
“Designing Technologies to Support North Korean Defectors with Depression”
- Seungje Woo (PhD student, Stanford University) *Jan. 2016 - present*
“Review on Information-communication Technologies for Diagnosis and Treatment of Alzheimer’s Diseases”
- Sangwook Lee (Undergraduate, Postech, Korea) *May 2016 - Nov. 2016*
“Designing Tools to Support Runners through User-centered Design Approach”
- Donghun Lee (Researcher, ETRI, Korea) *Sept. 2015 - June 2016*
“Designing Space-sharing Platforms through User-centered Design Approach”
- Jiyouon Lee (Undergraduate, Kwangwoon University, Korea) *Jan. 2016 - May 2016*
“Development of a Medication Information Generator System for Older Adults”

TECHNICAL SKILLS

- Programming: C/C#/C++, Java, Python, R, Scheme, JavaScript, Lisp, MATLAB, and Maple
- Applications: \TeX , \LaTeX , \BIBTeX , and other common productivity packages for Windows and Linux platforms
- Operating Systems: Microsoft Windows, iOS, Android, Linux, and Unix

SERVICE

Conference/Workshop Organization & Assistance

- Program Committee, ACM Annual Meeting of the Intelligent User Interfaces (IUI) Community *2017-2018*
- Assistant Editor, MedInfo 2017 Editorial Team *2017*
- Student Volunteer, ACM Conference on Human Factors in Computing Systems (CHI) *2015-2017*
- Organizer, Workshop on Social Media for Older Adults (SMOA) *2016*
- Student Volunteer, IEEE International Conference on Healthcare Informatics (ICHI) *2016*
- Student Volunteer, ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (BCB) *2016*
- Student Volunteer, AMIA Annual Symposium *2015*
- Web Chair, ACM Conference on Multimodal Interaction (ICMI) *2015*
- Student Volunteer, AMIA Joint Summits on Translational Science *2011-2012*
- Student Volunteer, Biomedical Computation at Stanford (BCATS) 11th Symposium *2010*

Publication Reviewer

- ACM Conference on Intelligent User Interfaces (IUI) 2017-2018
- AMIA Consumer and Pervasive Health Informatics Working Group Student Paper Reviewer 2017
- ACM Symposium on Spatial User Interaction (SUI) 2017
- ACM Australian Conference on Human-Computer Interaction (OzCHI) 2017
- Journal of Future Generation Computer Systems 2017
- International Journal of Distributed Sensor Networks 2017
- ACM Conference on Human-Computer Interaction with Mobile Devices and Services (Mobile HCI) 2017
- ACM Conference on Designing Interactive Systems (DIS) 2017
- ACM/IEEE Conference on Human-Robot Interaction (HRI) 2017
- ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) 2017
- ACM Conference on Interaction Design and Children (IDC) 2016-2017
- ACM Conference on Human Factors in Computing Systems (CHI) 2016-2017
- AMIA Translational Bioinformatics Year in Review 2016-2017
- AMIA Annual Symposium 2015, 2017
- Workshop on Visual Analytics in Healthcare (VAHC) 2016
- ACM Conference on Interactive Experiences for TV and Online Video (TVX) 2016

Other Service

- Student Liaison, Consumer and Pervasive Health Informatics Working Group, AMIA 2017-present
- Panelist, KSEA Seattle YG BioHealth Mentoring 2017
- Panelist, Fall 2017 Foundation for International Understanding Through Students (FIUTS) Grad-Only Oritation 2017
- Officer, Young Generation (YG) Group, KSEA Seattle Chapter 2016-present
- Alumni Interviewer, Stanford Alumni Interview Program 2015, 2017
- Mentor, AMIA High School Scholars Program 2015
- Organizer, National Mathematics and Science Competitions, KSEA Seattle Chapter 2014
- Booth Captain, CulturalFest, FIUTS, Univeristy of Washington 2013
- MS Admissions Committee Member, Computer Science Department, Stanford University 2011
- Shadow Program Mentor, University of Waterloo 2009-2010
- CS4U Volunteer, David R. C. School of Computer Science, University of Waterloo 2008-2009
- Dormitory Leader, KAIST Dormitory Association, KAIST 2007-2008

Professional Membership

- Member, American Medical Informatics Association (AMIA)
- Member, Korean-American Scientists and Engineers Association (KSEA)
- Member, Korean Computer Scientists and Engineers Association of America
- Member, Healthcare Information and Management Systems Society (HIMSS)
- Member, Association for Computing Machinery (ACM)