

Isaac Cho, Ph.D.

ASSISTANT PROFESSOR
COMPUTER SCIENCE DEPARTMENT

NORTH CAROLINA AGRICULTURAL & TECHNICAL STATE UNIVERSITY
502 McNair Hall, 1601 E Market Street, Greensboro, NC 27411

☎ (336) 285-3700 | ✉ icho@ncat.edu | 🏠 icho.ncat.edu | 🔗 LinkedIn | 🎓 Google Scholar

Education

Dec. 2013 **Doctor of Philosophy in Computing and Information Systems**

University of North Carolina at Charlotte, NC

Advisor: Dr. Zachary J. Wartell

Thesis Committee: Dr. William Ribarsky, Dr. Paula Goolkasian, Dr. Mark Faust

Feb. 2007 **Bachelor of Science in Computer Science,**

Hallym University

The Highest Honor in College (4.17/4.5)

Professional Appointments

North Carolina Agricultural & Technical State University

2019 - current **Assistant Professor**, Computer Science Department

University of North Carolina at Charlotte

2019 - current **Adjunct Professor**, Computer Science Department

2018 - 2019 **Research Assistant Professor**, Computer Science Department

2015 - 2017 **Research Associate**, Charlotte Visualization Center, Supervisor: *Dr. William Ribarsky, Dr. William Tolone*

2014 - 2015 **Postdoctoral Fellow**, Charlotte Visualization Center, Supervisor: *Dr. William Ribarsky*

2007 - 2013 **Graduate Research Assistant, Graduate Teaching Assistant**, Computer Science Department

Hallym University

2007 **Graduate Teaching Assistant**, Computer Science Department

Grants and Contracts

2020 **VIFI: Virtual Information-Fabric Infrastructure for Data-Driven Decisions from Distributed Data (sub-contract)**

Lead Principal Investigator: **Isaac Cho**

Source of Support: National Science Foundation (NSF, UNC Charlotte's subcontract, Lead PI: William Tolone)

Award Period: 10/1/2019 – 9/31/2021

Award Amount: \$74,627

2019 **Convergence Accelerator Phase I (RAISE): Building the Federalism Data and Advanced Statistics Hub (FDASH)**

Lead Principal Investigator: Jason Windett

Co-PI: **Isaac Cho**, Stephanie Moller, Samira Shaikh, Gordon Hull

Source of Support: NSF

Program: Convergence Accelerator Phase I (RAISE)

Award Period: 9/1/2019 – 5/31/2021

Award Amount: \$1,000,000, (NCAT portion: \$57,969)

2018 **EAGER: Real-Time: Visual Analytics for Enhanced Decision-Making and Situational Awareness in Modern Distribution Systems, with a Focus on Outage Prediction and Management**

Lead Principal Investigator: Valentina Cecchi
Co-PI: **Isaac Cho**, Tao Hong, Zachary Wartell
Source of Support: NSF
Program: Electrical, Communications and Cyber Systems (ECCS)
Award Period: 10/1/2018 - 9/30/2021
Award Amount: \$299,237 (NCAT portion: \$78,196)

DMD Advanced Visualization and Management of Data

Lead Principal Investigator: **Isaac Cho**
Co-PI: Valentina Cecchi, Zachary Wartell
Source of Support: Electric Power Research Institute (EPRI)
Award Period: 9/1/2018 - 12/31/2018
Award Amount: \$23,111

2017 **A Visual Analytics Approach for the Situationally Aware Distribution System**

Lead Principal Investigator: **Isaac Cho**
Co-PI: Valentina Cecchi, Wenwen Dou, Zachary Wartell
Source of Support: Electric Power Research Institute (EPRI)
Award Period: 9/1/2017 - 8/31/2018
Award Amount: \$45,000

2015 **Critical Infrastructure Breakdown (sub-contract)**

Lead Principal Investigator: William Ribarsky
Investigator: **Isaac Cho**
Source of Support: Department of Home and Security (DHS, Purdue's (VACCINE) subcontract, Lead-PI: David Ebert)
Award Period: 10/15/2015 – 6/30/2016
Award Amount: \$50,000

Conceptualization and Design for an Internet Scale Messaging System

Lead Principal Investigator: William Ribarsky
Investigator: **Isaac Cho**, Ramesh Shankar
Source of Support: Electric Power Research Institute (EPRI)
Award Period: 6/22/2015 – 8/21/2015
Award Amount: \$20,000

Internal Funding

2019 **Cognitive Biases on Decision Making in Virtual Reality**

Lead Principal Investigator: **Isaac Cho**
Co-PI: Samira Shaikh, Zachary Wartell
Source of Support: UNC Charlotte, College of Computing and Informatics
Award Period: 1/1/2019 - 6/30/2019
Award Amount: \$26,000

Pending Support

A1: Building the Federalism Data and Advanced Statistics Hub (F-DASH)

Lead Principal Investigator: Jason Windett

Co-PI: **Isaac Cho**, Samira Shaikh, Stephanie Moller, James Hendler

Source of Support: NSF

Period: 10/1/2019 - 9/30/2021

request Funding: \$4,998,807

Understanding the Role of Cognitive Biases on Trust Development in VR

Lead Principal Investigator: **Isaac Cho**

Co-PI: Alexia Galati, Samira Shaikh, Zachary Wartell

Source of Support: Facebook Research

Period: 8/1/2020 – 5/31/2021

request Funding: \$75,000

Publications

Refereed Journal Articles

- [J8] Z. Huang, X. Wang, L. Cai, Y. Tao, W. J. Tolone, M. El-Shambakey, S. Das Bhattacharjee, and I. Cho, “Blast risk assessment of wood residential buildings: West fertilizer plant explosion case,” *Journal of Performance of Constructed Facilities*, vol. 34, no. 3, p. 04020022, 2020
- [J7] O. T. Karaguzel, M. Elshambakey, Y. Zhu, T. Hong, W. J. Tolone, S. Das Bhattacharjee, I. Cho, W. Dou, H. Wang, S. Lu, *et al.*, “Open computing infrastructure for sharing data analytics to support building energy simulations,” *Journal of Computing in Civil Engineering*, vol. 33, no. 6, p. 04019037, 2019
- [J6] R. Wesslen, S. Santhanam, A. Karduni, I. Cho, S. Shaikh, and W. Dou, “Investigating effects of visual anchors on decision-making about misinformation,” in *Computer Graphics Forum*, vol. 38, pp. 161–171, Wiley Online Library, 2019
- [J5] A. Karduni, I. Cho, G. Wessel, W. Ribarsky, E. Sauda, and W. Dou, “Urban space explorer: a visual analytics system for urban planning,” *IEEE computer graphics and applications*, vol. 37, no. 5, pp. 50–60, 2017
- [J4] I. Cho, J. Li, and Z. Wartell, “Multi-scale 7dof view adjustment,” *IEEE transactions on visualization and computer graphics*, vol. 24, no. 3, pp. 1331–1344, 2017
- [J3] S. Ko, I. Cho, S. Afzal, C. Yau, J. Chae, A. Malik, K. Beck, Y. Jang, W. Ribarsky, and D. S. Ebert, “A survey on visual analysis approaches for financial data,” in *Computer Graphics Forum*, vol. 35, pp. 599–617, Wiley Online Library, 2016
- [J2] I. Cho, W. Dou, D. X. Wang, E. Sauda, and W. Ribarsky, “Vairoma: A visual analytics system for making sense of places, times, and events in roman history,” *IEEE transactions on visualization and computer graphics*, vol. 22, no. 1, pp. 210–219, 2015
- [J1] D.-H. Jeong, Y.-R. Kim, I. Cho, E.-J. Kim, K.-M. Lee, K.-W. Jin, and C.-G. Song, “Real-time image scanning system for detecting tunnel cracks using linescan cameras,” *Journal of Korea Multimedia Society*, vol. 10, no. 6, pp. 726–736, 2007

Peer-Reviewed Conference Papers

- [C19] A. Karduni, R. Wesslen, I. Cho, and W. Dou, “Du bois wrapped bar chart: Visualizing categorical data with disproportionate values,” in *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1–12, 2020
- [C18] S. D. Bhattacharjee, W. J. Tolone, A. Mahabal, M. Elshambakey, I. Cho, and G. Djorgovski, “View-adaptive weighted deep transfer learning for distributed time-series classification,” in *2019 IEEE 43rd Annual Computer Software and Applications Conference (COMPSAC)*, vol. 1, pp. 373–381, IEEE, 2019

- [C17] A. Karduni, I. Cho, R. Wesslen, S. Santhanam, S. Volkova, D. L. Arendt, S. Shaikh, and W. Dou, “Vulnerable to misinformation? veri!,” in *Proceedings of the 24th International Conference on Intelligent User Interfaces*, pp. 312–323, 2019
- [C16] S. D. Bhattacharjee, W. J. Tolone, M. Elshambakey, I. Cho, A. Mahabal, and G. Djorgovski, “Context-aware deep sequence learning with multi-view factor pooling for time series classification,” in *2018 IEEE International Conference on Big Data (Big Data)*, pp. 959–966, IEEE, 2018
- [C15] J. Li, I. Cho, and Z. Wartell, “Evaluation of cursor offset on 3d selection in vr,” in *Proceedings of the Symposium on Spatial User Interaction*, pp. 120–129, 2018
- [C14] T. Lawanson, R. Karandeh, V. Cecchi, Z. Wartell, and I. Cho, “Improving power distribution system situational awareness using visual analytics,” in *SoutheastCon 2018*, pp. 1–6, IEEE, 2018
- [C13] A. Karduni, R. Wesslen, S. Santhanam, I. Cho, S. Volkova, D. Arendt, S. Shaikh, and W. Dou, “Can you veri this? studying uncertainty and decision-making about misinformation using visual analytics,” in *Twelfth international AAAI conference on web and social media*, 2018
- [C12] I. Cho, R. Wesslen, S. Volkova, W. Ribarsky, and W. Dou, “Crystalball: A visual analytic system for future event discovery and analysis from social media data,” in *2017 IEEE Conference on Visual Analytics Science and Technology (VAST)*, pp. 25–35, IEEE, 2017
- [C11] I. Cho, R. Wesslen, A. Karduni, S. Santhanam, S. Shaikh, and W. Dou, “The anchoring effect in decision-making with visual analytics,” in *2017 IEEE Conference on Visual Analytics Science and Technology (VAST)*, pp. 116–126, IEEE, 2017
- [C10] A. Talukder, M. Elshambakey, S. Wadkar, H. Lee, L. Cinquini, S. Schlueter, I. Cho, W. Dou, and D. J. Crichton, “Vifi: Virtual information fabric infrastructure for data-driven discoveries from distributed earth science data,” in *2017 IEEE Cloud & Big Data Computing (CBDCOM)*, pp. 1–8, IEEE, 2017
- [C9] T. Eaglin, I. Cho, and W. Ribarsky, “Space-time kernel density estimation for real-time interactive visual analytics,” in *Proceedings of the 50th Hawaii International Conference on System Sciences*, 2017
- [C8] W. Dou, I. Cho, O. ElTayeby, J. Choo, X. Wang, and W. Ribarsky, “Demographicvis: Analyzing demographic information based on user generated content,” in *2015 IEEE Conference on Visual Analytics Science and Technology (VAST)*, pp. 57–64, IEEE, 2015
- [C7] J. Feng, I. Cho, and Z. Wartell, “Comparison of device-based, one and two-handed 7dof manipulation techniques,” in *Proceedings of the 3rd ACM Symposium on Spatial User Interaction*, pp. 2–9, 2015
- [C6] I. Cho and Z. Wartell, “Evaluation of a bimanual simultaneous 7dof interaction technique in virtual environments,” in *2015 IEEE Symposium on 3D User Interfaces (3DUI)*, pp. 133–136, IEEE, 2015
- [C5] J. Li, I. Cho, and Z. Wartell, “Evaluation of 3d virtual cursor offset techniques for navigation tasks in a multi-display virtual environment,” in *2015 IEEE Symposium on 3D User Interfaces (3DUI)*, pp. 59–66, IEEE, 2015
- [C4] I. Cho, J. Li, and Z. Wartell, “Evaluating dynamic-adjustment of stereo view parameters in a multi-scale virtual environment,” in *2014 IEEE Symposium on 3D User Interfaces (3DUI)*, pp. 91–98, IEEE, 2014
- [C3] I. Cho, X. Wang, and Z. J. Wartell, “Hyfinball: a two-handed, hybrid 2d/3d desktop vr interface for multi-dimensional visualization,” in *Visualization and Data Analysis 2014*, vol. 9017, p. 90170E, International Society for Optics and Photonics, 2014
- [C2] I. Cho, Z. Wartell, W. Dou, X. Wang, and W. Ribarsky, “Stereo and motion cues effect on depth perception of volumetric data,” in *Stereoscopic Displays and Applications XXV*, vol. 9011, p. 901118, International Society for Optics and Photonics, 2014
- [C1] I. Cho, W. Dou, Z. Wartell, W. Ribarsky, and X. Wang, “Evaluating depth perception of volumetric data in

semi-immersive vr,” in *Proceedings of the international working conference on advanced visual interfaces*, pp. 266–269, 2012

Peer-reviewed Book Chapter

- [B1] A. Karduni, I. Cho, G. Wessel, W. Dou, W. Ribarsky, and E. Sauda, “Urban activity explorer: Visual analytics and planning support systems,” in *International Conference on Computers in Urban Planning and Urban Management*, pp. 65–76, Springer, 2017

Peer-reviewed Workshop

- [W3] S. D. Bhattacharjee, W. J. Tolone, A. Mahabal, M. Elshambakey, I. Cho, A. a.-R. Nayeem, J. Yuan, and G. Djorgovski, “Multi-view, generative, transfer learning for distributed time series classification,” in *The 4th Big Data Transfer Learning Workshop, IEEE BigData 2019 workshop.*, IEEE, 2019
- [W2] M. Aboufoul, R. Wesslen, I. Cho, W. Dou, and S. Shaikh, “Using hidden markov models to determine cognitive states of visual analytic users,” in *Proceedings of the Machine Learning from User Interaction for Visualization and Analytics Workshop at IEEE VIS.*, 2018

Invited Workshop

- [W1] I. Cho and W. Zachary, “Volumetric selection with the hyball user interface,” in *1st Workshop on Immersive Volumetric Interaction (WIVI 2013) at IEEE VR Workshop*, IEEE, 2013

Peer-reviewed Poster

- [P3] T. Lawanson, R. Karandeh, V. Cecchi, Z. Wartell, and I. Cho, “Advancing the use of advanced metering infrastructure (ami) data through visual analytics,” in *DistribuTECH*, 2018
- [P2] M. Elshambakey, M. Khalefa, W. J. Tolone, S. Das Bhattacharjee, H. Lee, L. Cinquini, S. Schlueter, I. Cho, W. Dou, and D. J. Crichton, “Towards a distributed infrastructure for data-driven discoveries analysis,” in *2017 IEEE International Conference on Big Data (Big Data)*, pp. 4738–4740, 2017
- [P1] I. Cho, W. Dou, Z. Wartell, W. Ribarsky, and X. Wang, “Evaluating depth perception of volumetric data in semi-immersive vr,” in *2012 IEEE Virtual Reality*, pp. 95–96, 2012

Technical Report

- [T3] N. Radnia, A. Karduni, I. Cho, W. Z., and S. E., “Augmented: Reality:: Architecture: Interface,” in *Charlotte Visualization Center: University of North Carolina at Charlotte.*, 2017
- [T2] S. Afzal, I. Cho, C. Yau, J. Chae, S. Ko, A. Malik, K. Beck, W. Ribarsky, and D. Ebert, “Anomaly exploration and visual analytics in financial data,” in *VACINNE, Purdue university.*, 2015
- [T1] X. Wang, T. Butkiewicz, I. Cho, and Z. Wartell, “Towards utilizing heterogeneous analytics interfaces in coastal infrastructure management,” in *Charlotte Visualization Center: Technical Report UNCC-CVC-12-15, University of North Carolina at Charlotte*, 2012

Presentation

Invited Talks

Spring 2019 ”Interactive Visual and Data Analytics”, North Carolina A&T State University, Greensboro, NC

”Interactive Visual and Data Analytics”, Hallym University, Gvu Seminar, Chuncheon, South Korea

2017 ”A Visual Analytics Interface for Situationally Aware Distribution Systems.”, EPRI Grid Analytics and Power Quality conference and exhibits, Sacramento, CA

”A Visual Analytics Interface for Situationally Aware Distribution Systems.”, EPRI’s Distribution Modernization Demonstration (DMD) advisory meeting, Sacramento, CA

2016 “Information Bursts and a Twitter-Like Sensor Network “, EPRI’s Distribution Modernization Demonstration (DMD) advisory meeting, Chattanooga, TN

“How the Internet of Things will Transform the Electric Distribution System of the Future, and What We Are Doing about It”, Viscenter Seminar, UNC Charlotte

- “Tales of VR: Highlights from the IEEE Virtual Reality Conference”, Viscenter Seminar, UNC Charlotte
- 2015 “Towards a System that Supports Citizen Science”, Viscenter Seminar, UNC Charlotte
- 2010 “Human Perception of Volume Data under Virtual Environment and Volumetric Rendering Conditions”, Viscenter Seminar, UNC Charlotte

Conference and Workshop Presentations

- 2018 “Urban space Explorer: a Visual Analytics System for Urban Planning”, Computer Graphics and Applications (CG&A) session, IEEE Vis, Berlin, Germany
- 2017 “CrystalBall: A Visual Analytic System for Future Event Discovery and Analysis from Social Media Data” IEEE Visual Analytics Science and Technology (VAST), Phoenix, AZ
- 2015 “DemographicVis: Analyzing Demographic Information based on User Generated Content”, IEEE Visual Analytics Science and Technology (VAST), Chicago, IL.
- 2014 “Evaluating Dynamic-Adjustment of Stereo View Parameters in a Multi-Scale Virtual Environment”, IEEE Symposium on 3D User Interface (3DUI’14), Minneapolis, MN
- ”HyFinBall: a Bimanual Hybrid User Interface for Cross-Dimensional Visualization”, SPIE Electronic Imaging, Visualization and Data Analysis (VDA’14), San Francisco, CA
- 2013 “Volumetric Selection with the HyBall User Interface”, 1st Workshop on Immersive Volumetric Interaction (WIVI’13-Workshop) at IEEE Conference on Virtual Reality, Orlando, FL
- 2012 “Evaluating Depth Perception of Volumetric Data in Semi-Immersive VR”, IEEE Conference on Virtual Reality (VR’12-Poster), Orange County, CA

Teaching

North Carolina A&T State University

- Fall 2020* Instructor, COMP 895: Virtual Environments (graduate, enrollment:8)
Instructor, COMP 322: Internet Systems (undergraduate, enrollment:41)
- Spring 2020* Instructor, COMP 895: Web-based Visual Analytics (graduate, enrollment: 12)
- Fall 2019* Instructor, COMP 322: Internet Systems (undergraduate, enrollment: 35)
Instructor, COMP 495: Senior Project II (undergraduate, enrollment:10)

University of North Carolina at Charlotte

- 2020 Guest-Instructor, ARCH 7211: “Studio Lab 1: AR Architecture User Interfaces” (graduate)
- Summer 2018 Instructor, DSBA 5122: Visual Analytics (graduate)
- 2015 - 2018 Co-Instructor, DSBA 5122: Visual Analytics (graduate)
- 2018 Guest-Instructor, ARCH 7103: Topical Studio: “Museums of the 21st Century: Physical Setting & Augmented Reality.” (graduate)
- 2007 - 2013 Graduate Teaching Assistant, ITCS 6125/8125: Virtual Environments (graduate)
Graduate Teaching Assistant, ITCS 4121/5121 Information Visualization (graduate)
Graduate Teaching Assistant, ITCS 4120/6120/8120 Computer Graphics (undergraduate/graduate)

Hallym University

- 2005-2006 Teaching Assistant, Data Structure and Algorithm (Java), (undergraduate)
Teaching Assistant, Game Development (DirectX with C++), (undergraduate)
- 2004-2005 Undergraduate Mentor, Computer Graphics (OpenGL), undergraduate mentoring program
Undergraduate Mentor, Computer Programming (C++, Java), undergraduate mentoring program

Advising and Mentoring

Students Mentored (in the U.S.)

- 2018 Jonathan Pope, MS, UNCC
- 2015 - 2017 Todd Eaglin, Ph.D., UNCC
- 2017 Abhishek Harish Rattihalli, MS, UNCC
- 2014 Omar ElTayeb, Ph.D., UNCC
- 2013 Dominique Benito, undergraduate, REU
- 2013 Micheal Richardson, undergraduate, REU
- 2012 Rahul Shevde, MS, UNCC
- 2011 Emily Hudson, undergraduate, REU
- 2011 Jack Barefoot, undergraduate, UNCC

Undergraduate Students Supervised

- 2019 - current Katimu Lissa, NCA&T
- 2019 Bria Massey, NCA&T
- 2018-2019 Margaret Reichard, UNCC
- 2018 Heena Kwag, MS, UNIST (international exchange undergraduate scholar)

Master's Students Supervised

- 2019 Namrata Tathe, UNCC
- 2018 - 2019 Saloni Gupta, UNCC
- 2017-2018 Nicolas Ramos Gomez, UNCC
- 2017 Gabriel Fair, UNCC
- 2016 Keval Shah, UNCC
- 2016 Keenan Reed, UNCC

Doctoral Students Supervised

- 2020 - current Dongyun Han, NCA&T
- 2018 - current Raihan Nayeem, UNCC

Dissertation Committees

- Jinbo Feng, Ph.D., Computer Science, UNCC proposal, dissertation committee members
- Jialei Li, Ph.D. Computer Science, UNCC, proposal, dissertation committee members
- Okkyun Im, Ph.D. School of Architecture, UNCC, qualifier, proposal, dissertation committee members
- Alireza Karduni, Ph.D. Computer Science, UNCC, qualifier, proposal, dissertation committee members
- Alireza Karduni, MS. School of Architecture, UNCC, dissertation committee member
- Ryan Wesslen, Ph.D. Computer Science, UNCC, qualifier, proposal, dissertation committee members
- Sashank Santhanam, Ph.D. Computer Science, UNCC, qualifier committee member
- Armin Amirazar, Ph.D. School of Architecture, UNCC, qualifier, proposal, dissertation committee members
- Zhipeng Liu, Ph.D. Computer Science, NCA&T, proposal, dissertation committee members

Honors & Awards

- 2019 Best Workshop Paper Award, "Multi-View, Generative, Transfer Learning for Distributed Time Series Classification", The 4th Big Data Transfer Learning Workshop, IEEE BigData 2019 workshop.

- 2007 The Highest Honor in College, College of Engineering, Department of Computer Science, Hallym University
Recipient of Korean Government Scholarships (BK 21, NURI): 1. University of North Carolina at Charlotte, NC, United States, “Video Game Design and Development” summer program 2. Central Queensland University, Rockhampton, Australia, English training summer program
- 2006 Recipient of Korean Government Scholarship for Academic Excellence (BK21, NURI), Hallym University
Recipient of the Best Mentor, Undergraduate Mentoring Program of the Computer Science Department, Hallym University.
- 2005 Recipient of Korean Government Scholarship for Academic Excellence (BK21, NURI), Hallym University
Recipient of the Best Mentor, Undergraduate Mentoring Program of the Computer Science Department, Hallym University
- 2002 Recipient of Korean Government Scholarship for Academic Excellence (BK21), Hallym University

Professional Services

Organizing and Program Committees

- 2021 **Poster Chair**, IEEE Virtual Reality and 3D User Interfaces (VR)
Program Committee, Virtual and Augmented Reality Simulations (ICVARS)
- 2020 **Poster, Demo, Interaction Co- Chair**, ACM Spatial User Interaction (SUI)
Program Committee, IEEE Artificial Intelligence and Virtual Reality (AIVR)
Program Committee (VAST short paper), IEEE Visualization
Program Committee, International Symposium on Visual Computing (ISVC)
Program Committee, IEEE Innovate-Data
Poster Chair, IEEE Virtual Reality and 3D User Interfaces (VR)
- 2019 **Program Committee**, IEEE Artificial Intelligence and Virtual Reality (AIVR)
Program Committee (VAST short paper), IEEE Visualization
Program Committee, ACM Spatial User Interaction (SUI)
Program Committee, International Symposium on Visual Computing (ISVC)
Program Committee (conference-paper track), IEEE Virtual Reality and 3D User Interfaces (VR)
- 2018 **Program Committee**, Innovate-Data
Program Committee (conference-paper track), IEEE Virtual Reality and 3D User Interfaces (VR)
Program Committee, ACM Spatial User Interaction (SUI)
Program Committee, IEEE Artificial Intelligence and Virtual Reality (AIVR)
Program Committee, International Symposium on Visual Computing (ISVC)
- 2017 **Program Committee**, IEEE 3D User Interfaces (3DUI)
Program Committee, ACM Spatial User Interaction (SUI)
- 2016 **Program Committee**, ACM Spatial User Interaction (SUI)
Local Arrangement Co-Chair, IEEE Virtual Reality (VR)
- 2015 **Program Committee**, ACM Spatial User Interaction (SUI)
Poster and Demo Co-Chair, ACM Spatial User Interaction (SUI)

Peer-Review Experience and Others

SPIE Visualization and Data Analysis (VDA)

ACM Spatial User Interaction (SUI)

IEEE 3D User Interfaces (3DUI)

IEEE Visual Analytics Science and Technology (VAST)

IEEE Virtual Reality (VR)

IEEE Transaction on Haptics

IEEE International Symposium on Mixed and Augmented Reality (ISMAR)

IEEE Artificial Intelligence and Virtual Reality (AIVR)

International Symposium on Visual Computing (ISVC)

ACM Transaction on Interactive Intelligent Systems (TiiS)

ACM CHI Conference on Human Factors in Computing Systems

ACM Transactions on Management Information Systems (TMIS)

2013-2019 Mailing list moderator, IEEE Virtual Reality (VR)

Faculty member, the Ribarsky Center for Visual Analytics, UNC Charlotte

Faculty member, Cognitive Science Initiative, UNC Charlotte

Faculty member, Center of Excellence in Cybersecurity Research, Education, and Outreach (CREO) , NC A&T

References

Available Upon Request.