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Educations

Dec 2013	Doctor of Philosophy in Computer Science University of North Carolina at Charlotte, NC Dissertation: "Bimanual Stereoscopic Interaction for 3D Visualization" Advisor: Dr. Zachary J. Wartell.
2007	Bachelor of Science in Computer Science (3.71/4.0) summa cum laude Hallym University, Republic of Korea

General Research Interests

3D User Interface	Virtual Environment
Interactive 2D/3D Visualization	Spatial User Interface
Human-Computer Interaction	Interactive Visual Analytics

Professional Experiences

June 2015 – present	Charlotte Visualization Center, University of North Carolina at Charlotte <ul style="list-style-type: none"> Research Associate
2014 – 2015	Charlotte Visualization Center, University of North Carolina at Charlotte <ul style="list-style-type: none"> Postdoctoral Fellow
Fall 2013 – Fall 2007	Department of Computer Science, University of North Carolina at Charlotte <ul style="list-style-type: none"> Graduate Research Assistant Graduate Teaching Assistant
Spring 2007	Department of Computer Science, Hallym University <ul style="list-style-type: none"> Graduate Teaching Assistant
2006-2007	<ul style="list-style-type: none"> Graduate and Undergraduate Research Experiences <ul style="list-style-type: none"> Graphics & Virtual Environment (GVE) Lab under the supervision of Dr. Chang Geun Song
Fall 2006 Spring 2006	<ul style="list-style-type: none"> Undergraduate Teaching Experience <ul style="list-style-type: none"> Computer Graphics Computer Programming

Services

2013 – present	IEEE Virtual Reality (VR) mailing list moderator
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2015	ACM Spatial User Interface (SUI) 2015 International Committee Member and Poster and Demos Co-Chair IEEE Virtual Reality (VR) 2016 Local Arrangement Co-Chair
Summer, 2011 - 2013	Graduate Mentor, Research Experience for Undergraduates (REU), University of North Carolina at Charlotte
Reviewer	SPIE Visualization and Data Analysis (VDA), ACM SUI, IEEE 3DUI

Teaching

Fall, 2015 – Spring 2016	Co-instructor, Visual Analytics (DSBA-5122) University of North Carolina at Charlotte
2007-2013	Graduate Teaching Assistant, ITCS 6125/8125 Virtual Environment, ITCS 4121/5121 Information Visualization, ITCS 4120/6120/8120 Computer Graphics University of North Carolina at Charlotte
2005-2006	Graduate Teaching Assistant, Data Structure and Algorithm (Java), Game Development (DirectX with C++), Hallym University, Chuncheon, South Korea
2004-2005	Undergraduate Mentor, Undergraduate Mentoring program, Computer Graphics (OpenGL), Computer Programming (C++, Java), Hallym University, Chuncheon, South Korea

Graduate Advising

2015	Dissertation Committee Member, Jinbo Feng, University of North Carolina at Charlotte
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Honors/Awards

2007-2012	Graduate School Dean's Fellowship, University of North Carolina at Charlotte
2007	Summa cum laude (GPA 4.17/4.5), Department of Computer Science, Hallym University
2006	Recipient of Korean Government Scholarship (BK 21, NURI) <ul style="list-style-type: none"> University of North Carolina at Charlotte, NC, United States, "Video Game Design and Development" summer program Central Queensland University, Rockhampton, Australia, English training summer program
2002,2005,2006	Recipient of Korean Government Scholarship for Academic Excellence (BK21, NURI), Hallym University
2006	Recipient of the Best Mentor, Undergraduate Mentoring Program, Hallym

University.

2005 Recipient of the Best Mentor, Undergraduate Mentoring Program of the Computer Science Department, Hallym University.

Conference Presentations

- 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

Publications

- Journal [1] **Cho, I.**, Dou, W., Wang, X., Sauda, E. and Ribarsky, W. “VAiRoma: A Visual Analytics System for Making Sense of Places, Times, and Events in Roman History”, IEEE Transactions on Visualization and Computer Graphics (TVCG), 2015. (22% acceptance rate)
- [2] Jeong, D. H., Kim, Y. R., **Cho, I.**, Kim, E. J., Lee, K. M., Jin, K. W., and Song, C. G., “Real-time Image Scanning System for Detecting Tunnel Cracks Using Linescan Cameras.” In journal of Korea Multimedia Society, Vol. 10, No. 6, 2007
- Conference [3] Dou, W., **Cho, I.**, ElTayeb, O., Choo, J. Wang, X. and Ribarsky, W. “DemographicVis: Analyzing Demographic Information based on User Generated Content”, IEEE Visual Analytics Science and Technology (VAST), 2015. (22% acceptance rate)
- [4] Feng, J., **Cho, I.**, and Wartell, Z. “Comparison of Device-Based, One and Two-Handed 7DOF Manipulation Techniques.”, ACM Spatial User Interface (SUI), Los Angeles, CA, August, 2015. 35% acceptance rate)
- [5] **Cho, I.**, and Wartell, Z. “Evaluation of a Bimanual Simultaneous 7DOF

Interaction Technique in Virtual Environments.”, IEEE 3D User Interface (3DUI), Arles, France, March, 2015. (32% acceptance rate)

- [6] Li, J., **Cho, I.** and Wartell, Z. “Evaluation of 3D Virtual Cursor Off set Techniques for Navigation Tasks in a Multi-Display Virtual Environment.”, IEEE 3D User Interface (3DUI), Arles, France, March, 2015. (32% acceptance rate)
- [7] **Cho, I.**, Li, J. and Wartell, Z. “Dynamic Adjustment of Stereoscopic View Parameter for a Multi-Scale Virtual Environment.”, IEEE 3D User Interface (3DUI), Minneapolis, MN, March, 2014.(20% acceptance rate)
- [8] **Cho, I.**, Wang, X. and Wartell, Z. “HyFinBall: a Two-Handed, Hybrid 2D/3D Desktop VR Interface for Multi-Dimensional Visualization.”, SPIE 9017, VDA (Visualization and Data Analysis) Feb, 2014, San Francisco, CA., USA
- [9] **Cho, I.**, Wartell, Z., Dou, W., Wang, X. and Ribarsky, W. “Stereo and Motion Effect on Depth Judgment for Volumetric Dataset.”, SPIE 9011, Stereoscopic Displays and Applications XXV (SD&A) Feb, 2014, San Francisco, CA, USA
- [10] **Cho, I.**, Dou, W, Wartell, Z. Ribarsky, W. and Wang, X. “Evaluating Depth Perception of Volumetric Data in a Semi-Immersive VR.” In Proceedings of the International Working Conference on Advanced Visual Interfaces (AVI '12), ACM, New York, NY, USA, 266-269. (28% acceptance rate)
- [11] **Cho, I.**, and Wartell, Z. “Volumetric Selection with the HyBall User Interface.” 1st Workshop on Immersive Volumetric Interaction (WIVI 2013) at IEEE VR Workshop, Orlando, FL. 2013
- [12] **Cho, I.**, Dou, W., Wartell, Z., Ribarsky, W. and Wang, X. “Evaluating Depth Perception of Volumetric Data in Semi-Immersive VR.” Poster – IEEE VR (Virtual Reality) 2012.
- [13] Wang, X., Butkiewicz, T., **Cho, I.**, and Wartell, Z. “Towards Utilizing Heterogeneous Analytics Interfaces in Coastal Infrastructure Management.” Charlotte Visualization Center: Technical Report UNCC-CVC-12-15, University of North Carolina at Charlotte. March 2012.

Workshop,
Poster and
Technical Report