AMY BANIĆ

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1000 E. University Ave, Dept. 3315. Laramie, WY 82071

EDUCATION

Post-Doctoral Fellowship, Clemson University, 2010.
Concentration: Virtual and Augmented Reality, Virtual Humans, and 3D User Interfaces.
Advisor: Larry F. Hodges

Ph.D. in Computer Science, University of North Carolina at Charlotte, 2008.
Concentration: Virtual and Augmented Reality, Immersive Visualization, Virtual Humans, and 3D User Interfaces.
Advisor: Larry F. Hodges *Co-Advisors:* Celine Latulip, Paula Goolkasian, Zachary Wartell.

M.S. in Computer Science, University of North Carolina at Charlotte, 2005.
Concentration: Virtual and Augmented Reality, Virtual Humans, and 3D User Interfaces.
Advisor: Larry F. Hodges

B.S. in Computer Science, Duquesne University, 2003.
Senior Project: Designed and Developed 3D Digital Modeling and Mesh Deformation Software to Mimic Clay-Based Sculpting Interaction.
Advisor: Jeffery Jackson

B.A. in Studio and Digital Art, Duquesne University, 2003.

ACADEMIC POSITIONS AND EMPLOYMENT

Associate Professor, Computer Science, University of Wyoming, 2017 – Present.

Visiting Professor, Sabbatical, ATLAS Institute, University of Colorado - Boulder, Spring 2020.

Assistant Professor, Computer Science, University of Wyoming, 2010 – 2017.

Joint Appointment, Idaho National Laboratory, 2010 – Present.

Postdoctoral Fellowship, Clemson University, School of Computing, Human-Centered Computing Division, 2008-2010.

Research Scientist Intern, U.S. Naval Research Laboratory, 2006.

Graduate Research Assistantship, Computer Science, University of North Carolina at Charlotte, 2003-2005, 2006-2008.

Graduate Teaching Assistantship, Computer Science, University of North Carolina at Charlotte, 2005-2006.

Undergraduate Research Assistantship, Computer Science, Duquesne University, 2002-2003.

Undergraduate Teaching Assistantship, Computer Science, Duquesne University, 2001-2003.

Web Development Intern, Ceeva, Inc., 2001-2002.

PEER REVIEWED PUBLICATIONS

Note: that it is customary in this research field for adviser to be listed last in the author list.
** indicates undergraduate student author.*
*** Gaps or reduction in publication record may be explained by approved leaves as a result of child birth for my two children in years 2012 and 2017, and unexpected death of my younger brother in the year 2019.*

- Todd, R., Zhu, Q., & **Banić, A.** (2021). Temporal Availability of Ebbinghaus Illusions on Perceiving and Interacting with 3D Objects in a Contextual Virtual Environment. In 2021 IEEE Virtual Reality and 3D User Interfaces (VR) (pp. 817-825). IEEE. **(Acceptance Rate: 23%)**
- Khadka, R., & **Banić, A.** (2020). Effects of Egocentric Versus Exocentric Virtual Object Storage Technique on Cognition in Virtual Environments. In 2020 IEEE Conference on Virtual Reality and 3D User Interfaces (VR) (pp. 205-209). IEEE.
- **Banić, A.**, Horwitz, E.*, & Zheng, C. (2020, March). Kinetic Skin: Feasibility and Implementation of Bare Skin Tracking of Hand and Body Joints for 3D User Interfaces. In 2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW) (pp. 35-39). IEEE.
- Wallace, L.*, Delaurante, T.*, Simon, M.*, Austin, R.*, Rolich, T.*, Khadka, R., & **Banić, A.** (2020). Squishy Volumes: Evaluation of Silicone as Camera-less Pressure-Based Input for 3-Dimensional Interaction. In 2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW) (pp. 29-34). IEEE.
- Kasarda, C.*, Swartz, M.*, Mitchell, K.*, Khadka, R., & **Banić, A.** (2020). Effects of Physical Prop Shape on Virtual Stairs Travel Techniques. In 2020 IEEE Conference on Virtual Reality and 3D User Interfaces, Abstracts and Workshops (VRW) (pp. 672-673)
- Khadka, R., & **Banić, A.** (2020). Prop-Based Egocentric and Exocentric Virtual Object Storage Techniques. In 2020 IEEE Conference on Virtual Reality and 3D User Interfaces, Abstracts and Workshops (VRW) (pp. 778-779). IEEE.
- Khadka, R., & **Banic, A.** (2019). Body-Prop Interaction: Evaluation of Augmented Open Discs and Egocentric Body-Based Interaction. In 2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR) (pp. 1705-1710). IEEE.
- Khadka, R., & **Banic, A.** (2019). Position Paper: Factors of Perceived Tactile Cue Dominance when Interacting with Moving Virtual Objects. In 2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR) (pp. 1760-1764). IEEE.
- Godse, A., Khadka, R., & **Banic, A.** (2019). Evaluation of Visual Perception Manipulation in Virtual Reality Training Environments to Improve Golf Performance.

In 2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR) (pp. 1807-1812). IEEE.

- **Banic, A.,** & Gamboa, R. (2019). Visual Design Problem-based Learning in a Virtual Environment Improves Computational Thinking and Programming Knowledge. In 2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR) (pp. 1588-1593). IEEE.
- Khadka, R., & **Banic, A.** (2019). Knobcollector: Custom device controller for dynamic real-time subjective data collection in virtual reality. In International Conference on Human-Computer Interaction (pp. 84-95). Springer, Cham.
- Benavides, A., Khadka, R., & **Banic, A.** (2019). Physically-Based Bimanual Volumetric Selection for Immersive Visualizations. In International Conference on Human-Computer Interaction (pp. 183-195). Springer, Cham.
- Loyd, J., Pence, T., & **Banic, A.** (2019). To Speak or to Text: Effects of Display Type and I/O Style on Mobile Virtual Humans Nurse Training. In International Conference on Human-Computer Interaction (pp. 115-132). Springer, Cham.
- Hunt, E.O.*, & **Banic, A.** (2018). An Exploration of Altered Muscle Mappings of Arm to Finger Control for 3D Selection. In Proceedings of the Symposium on Spatial User Interaction (pp. 191-191). ACM.
- Khadka, R., Money, J., and **Banic, A.** (2018). Evaluation of Scientific Workflow Effectiveness for a Distributed Multi-User Multi-Platform Support System for Collaborative Visualization. To appear in Proceedings of the Practice and Experience in Advanced Research Computing 2018 on Sustainability, Success, and Impact. ACM.
- Khadka, R., Money, J., & **Banic, A.** (2018). Support Collaboration Across Geographically Distributed Users Using Heterogeneous Virtual Reality Systems. In International Conference on Human-Computer Interaction (pp. 280-288). Springer, Cham.
- Benavides, A., Khadka, R., Hunt, E. and **Banic, A.** (2018). Physically-Based Bimanual Volumetric Selection for Immersive Visualizations. To appear in proceedings of International Conference on Human-Computer Interaction. Springer, Cham.
- Khadka, R., Money, J., & **Banić, A.** (2018). Body-Prop Interaction: Augmented Open Discs and Egocentric Body-Based Interaction for Exploring Immersive Visualizations. In Proceedings of the 2018 ACM International Conference on Interactive Surfaces and Spaces (pp. 327-332). ACM.
- Khadka, R., Shetty, N., Whiting, E., and **Banic, A.** (2016) Evaluation of Collaborative Actions to Inform Design of a Remote Interactive Collaboration Framework for Immersive Data Visualizations. In Proceedings of International Symposium on Visual Computing (ISVC), accepted, paper, oral presentation.
- Khadka, R., Money, J., and **Banic, A.** (2016). Using Low Cost Multi-Sensory Output Cues to Support Proxemics and Kinesics Across Heterogeneous Systems. In Proceedings of ISS Cross-Surface Workshop.
- Wilches, D. and **Banic, B.** (2016) "VolSelectAware: Visual-Cognition Coupled Non-Visual Data-Driven Volume Selection for Immersive Scientific Visualizations" Poster, The 9th International Symposium on Visual Information Communication and Interaction (VINCI).

- Pradhan, N., Benavides, A., Zhu, Q., and **Banic, A.** (2015) "Evaluation of Fatigue Measurement Using Human Motor Coordination for Gesture-Based Interaction in 3D Environments". In Proceedings of International Symposium on Visual Computing (ISVC).
- Sakou, L., Wilches, D., and **Banic, A.** (2015) "Region Growing Selection Technique for Dense Volume Visualization. In Proceedings of International Symposium on Visual Computing (ISVC).
- Nguyen, A. and **Banic, A.** (2015) "3DTouch: A wearable 3D input device for 3D applications" Proceedings of IEEE Virtual Reality 2015, Arles, France. **(Acceptance Rate: 23.1%)**
- **Banic, A.** (2014) "Selection Classification for Interaction with Immersive Volumetric Visualizations". In proceedings of HCI International 2014, Crete, Greece.
- Sun, Z., Dhital, A., Areejitkasem, N., Pradhan, N.*, **Banic, A.** (2014). "Effects on Performance of Analytical Tools for Visually Demanding Tasks through Direct and Indirect Touch Interaction in an Immersive Display". In proc. of 4th International Conference on Virtual Reality and Visualization. Shenyang, China, ICVRV 2014.
- Dhital, A., and **Banic, A. U.** (2013). "Navigation Path Differences for Dichotic Listening BCI in Virtual Environments." In workshop on Virtual and Augmented Assistive Technology at IEEE Virtual Reality 2013, IEEE Proceedings.
- Nguyen, A. and **Banic, A.** (2013). "Low-cost Augmented Reality prototype for controlling network devices", In Workshop on Off-The-Shelf Virtual Reality at IEEE Virtual Reality 2013, IEEE Proceedings.
- Jaff, L., Hayes, A.*, **Banic, A.U.** (2013) "VWSocialLab: Prototype Virtual World (VW) Toolkit for Social and Behavioral Science Experimental Set up and Control". In proc. of HCI International 2013, Las Vegas, Nevada 22-26 July, 2013.
- Lawrence, K.*, Maas, A.*, Pradhan, N.*, Ford, T.*, Shinker, J., & **Banic, A. U.** (2013). Investigation of interaction modalities designed for immersive visualizations using commodity devices in the classroom. In proc. of HCI International 2013, Las Vegas, Nevada 22-26 July, 2013.
- Wiederrecht, M. A., & **Ulinski, A. C.** (2012, January). "Developmentally appropriate intelligent spatial tutoring for mobile devices." In Proceedings of Intelligent Tutoring Systems (pp. 594-596). Springer Berlin Heidelberg.
- Bloodworth, T., Cairco, L., McClendon, J., Hodges, L.F., Babu, S., Meehan, N., Johnson, A., **Ulinski, A.** (2012) "Initial Evaluation of a Virtual Pediatric Patient System." In Proceedings of Carolina Women in Computing 2012 (CWIC 2012). Columbia, SC, February 17-18.
- McClendon, J., Ekandem, J., Hayes, A., **Ulinski, A.,** and Hodges, L.. (2011) "DeskTop: An Ergonomic Design for a Scalable, Collaborative Multi-Touch Display", In Proceedings of HCI International 2011, Orlando, FL.
- Hodges, L., **Ulinski, A.,** Bloodworth, T., Hayes, A., and Smotherman, J.M. (2011) "Second Life and a Platform for Creating Intelligent Virtual Agents", In Proceedings of HCI International 2011, Orlando, FL.
- Hayes, A., **Ulinski, A.,** and Hodges, L.F. (2010). "That Avatar is Looking at Me! Social Inhibition in Virtual Worlds." In Proceedings of 10th International Conference on Intelligent Virtual Agents, Philadelphia, PA. **Acceptance rate: 22.8%**

- Cairco, L., **Ulinski, A.C.,** McClendon, J., Bloodworth, T., Matheison, J., Hodges, L.F., and Summers, J. (2010). "Interface Design and Display Modalities to Improve the Vehicle Inspection Process." In Proceedings of ASME 2010 World Conference on Innovative Virtual Reality (WINVR), Ames, Iowa.
- **Ulinski, A.,** Wartell, Z., Goolkasian, P., Suma, E., and Hodges, L. F. (2009). "Selection Performance Based on Classes of Bimanual Actions." In Proceedings of 3DUI 2009, Lafayette, LA. **(Acceptance rate: 25%)**
- Suma, E.A., Finkelstein, S.L., Reid, M., **Ulinski, A.,** Hodges, L.F., (2009). "Real Walking Increases Simulator Sickness in Navigationally Complex Virtual Environments," In Proceedings of the Virtual Reality Conference 2009. VR 2009. IEEE , vol., no., pp.245-246, 14-18.
- Ulinski, A., Zanbaka, C., Wartell, Z., Goolkasian, P., and Hodges, L. F. (2007) "Two-handed selection techniques for 3D volumetric data." In Proceedings of 3DUI 2007, Charlotte, NC, 107-114. **(Acceptance rate: 31.1%)**
- Zanbaka, C**., Ulinski, A.,** Goolkasian, P., and Hodges, L. F. (2007) "Social responses to virtual humans: Implications for future interface design." **Honorable Mention for Best of CHI Award.** In Proceedings of CHI 2007, ACM Press (2007), 1561-1570.
- Cairco, L., Babu, S., **Ulinski, A.,** Zanbaka, C., and Hodges, L. F. (2007). Shakespearean karaoke. In Proceedings of the 2007 ACM Symposium on Virtual Reality Software and Technology (Newport Beach, California, November 05 - 07, 2007). S. N. Spencer, Ed. VRST '07. ACM, New York, NY, 239-240.
- Ziemkiewicz, C., **Ulinski, A.,** Zanbaka, C., Hardin, S., and Hodges, L. F. (2005). "Interactive Digital Patient for Triage Nurse Training." First International Conference on Virtual Reality, Las Vegas, Nevada 22 - 27 July.
- Zanbaka, C., **Ulinski, A.,** Goolkasian, P., and Hodges, L. F. (2004). "Effects of Virtual Human Presence on Task Performance," Proceeding of the International Conference on Artificial Reality and Telexistence (ICAT), pp.174-181.
- Zanbaka, C., Lok, B., Babu, S. Xiao, D., **Ulinski, A,** and Hodges L.F. (2004). "Effects of Travel Technique on Cognition in Virtual Environments," In Proceedings of IEEE Virtual Reality 2004, Chicago, IL, 149-156, 286. (Acceptance rate: 20.3%)

JOURNAL PUBLICATIONS

- **Banic, A.** and Gamboa, R. (2016). Code as Spatial Brushes: Visual Arts Pedagogy-Driven Computer Science Education Through Online Virtual Environments. Frontiers Journal in Information and Communication Technology (ICT), Virtual Environments.
- Dukes, L.C., **Banic, A.U.,** McClendon, J., Pence, T.B., Mathieson, J., Hodges, L.F., Summers, J.D. (2012) "Evaluation of System-Directed Multimodal Systems for Vehicle Inspection", JCISE.
- Suma, E., Finkelstein, S., Reid, M.,Babu, S., **Ulinski, A.,** and L.F. Hodges. (2009). "Evaluation of the Cognitive Effects of Travel Technique in the Real and Virtual World," In IEEE Transactions on Visualization and Computer Graphics.
- Zanbaka, C., Lok, B., Babu, S. Xiao, D., **Ulinski, A.,** and Hodges L.F. (2005). "Comparison of Path Visualizations and Cognitive Measures relative to Travel

Technique in a Virtual Environment." In IEEE Transactions on Visualization and Computer Graphics.

PEER REVIEWED POSTERS

- Wilches, D. and **Banic, A.** (2016). VolSelectAware: Visual-Cognition Coupled Non-Visual Data-Driven Volume Selection for Immersive Scientific Visualizations. The 9th Symposium on Visual Information Communication and Interaction, VINCI, 2016.
- Benavides, A., Kunchala, A., and **Banic, A.** (2014). "Auditory-Based BCI Navigation Techniques to Reduce Continued EEG Training for Virtual Reality", Poster, RMCWiC 2014.
- Khadka, R., Sun, Z., Nguyen, A., Sakou, L., Anand, A., and **Banic, A.** (2014). "Mobile Bimanual Touch-based Hybrid 2D and 3D Techniques for 3D Visualizations", Poster, RMCWiC, 2014.
- Dhital, A., and **Banic, A. U.** (2013). "Navigation in a virtual environment by dichotic listening: Simultaneous audio cues for user-directed BCI classification." In Proceedings of IEEE Virtual Reality (VR), 2013 IEEE (pp. 71-72).
- Sun, Z. and **Banic, A.** (2012) "Immersive Visualization in a CAVE? There's an app for that: Mobile Devices as a Universal Medium for Interaction" Poster, RMCWIC, 2012.
- Pradhan, N. and **Banic, A.** (2012) "Hybrid 6DOF Mobile Interaction for Volume Manipulation in Stereoscopic Display Environments." Poster, RMCWIC, 2012.
- Dhital, A. and **Banic, A.** (2012) "Interact with Your Ears: Exploration of Audio and Visual Associative Cues for Brain Computer Interface Classification", Poster, RMCWIC, 2012.
- Areejitkasem, N. and **Banic, A..** (2012)"Evaluation of Color and SSVEP-Based BCI Classification", Poster, RMCWIC, 2012.
- Wiederrecht, M. and **Banic, A.** (2012) "Intelligent Tutoring Systems for Early Childhood Education- Why? " Poster, RMCWIC, 2012.
- Asiri, Y. and **Banic, A.** (2012)"Evaluation of Mobile Touch-Based Collaboration Styles that Facilitate Task-Focused Talk to Enhance Spatial Ability Learning." Poster, RMCWIC, 2012.
- **Ulinski, A.,** Wartell, Z., and Hodges, L. F. (2007). "Bimanual task division preferences for volume selection." In Proceedings of the 2007 ACM Symposium on Virtual Reality Software and Technology (Newport Beach, California, November 05 - 07, 2007). S. N. Spencer, Ed. VRST '07. ACM, New York, NY, 217-218.

BOOKS AND BOOK CHAPTERS

- Torin Hopkins, S. Sandra Bae, Julia Uhr, Clement Zheng, and **Amy Banić,** User Interfaces in Smart Cities. https://link.springer.com/content/pdf/10.1007%2F978-3-030-15145-4_94-1.pdf, Chapter in Augusto, J. C. (Ed.). (2020). Handbook of smart cities. Springer International Publishing. https://doi.org/10.1007/978-3-030-15145-4
- Hunt, E.*, Khadka, R., & **Banić, A. C.** (2019). Bi-Manual Interaction for Manipulation, Volume Selection, and Travel: Using the Leap Motion, Game Controllers and Mobile Devices. In VR Developer Gems (pp. 161-210). AK Peters/CRC Press. Chapter in

Sherman, W.R. (Ed.). (2019). VR Developer Gems (1st ed.). A K Peters/CRC Press. https://doi.org/10.1201/b21598

OTHER ARTICLES (LIGHTLY OR NOT PEER REVIEWED)

- Wilches, D. and **Banic, A.** (2016). "Extended Abstract: Making Virtual Environments more Immersive by using Mechanical Haptic Devices", In proceedings of the Doctoral Consortium of the IEEE Virtual Reality conference, Greenville, SC.
- Khadka, R. and **Banic, A.** (2016). "Investigation of Multi-Sensory Cue Techniques to Support Proxemics, Kinesics and Context for Remote Heterogeneous Collaborative Virtual Environments", In proceedings of the Doctoral Consortium of the IEEE Virtual Reality conference, Greenville, SC.
- Benavides, A., Wilches, D., and **Banic, B.** (2016). Talk: Research on Studying Bimanual Actions to Inform Interaction Techniques. Rocky Mountain Celebration of Women in Computing, Salt Lake City, UT.
  Phung, T.* and **Banic, A.** (2016). Poster: Investigation on the Use of Perception Manipulation to Enhance Virtual Reality Training. Rocky Mountain Celebration of Women in Computing, Salt Lake City, UT. **Won 3rd Place in Poster Contest.**
- Benavides, A. and **Banic, A.** (2016) Poster: Tele-Collaboration in Remote Immersive 3D Virtual Environments and Visualizations. Rocky Mountain Celebration of Women in Computing, Salt Lake City, UT.
- **Banic, A.** (2014). "User-Centric Adaptation in Interaction for Immersive Simulations". In proceedings of the New Frontiers in Product Modeling and Simulation (NAFEMS) Regional Conference 2014, Colorado Springs, CO.
- Nguyen, A., & **Banic, A.** (2014). 3DTouch: A wearable 3D input device for 3D applications. Technical Report, Research Gate.
- **Banic, A.** *Featured in,* O'Leary, P., Sherman, W. R., Shetty, N., Clark, J., & Hulme, D. (2013) Providing a Progression of Immersive Visualization Technologies. Workshop at Super Computing '13.

FELLOWSHIPS AND RESEARCH ASSISTANTSHIPS AWARDED TO STUDENTS

- 2021-2022: NSF, Documenting Arapaho Place Names with Virtual Reality Elicitation Using 3D 360 and Aerial Drone Video, Milana Wolff.
- 2019-2021: Wyoming INBRE, Wyoming INBRE Graduate Assistantship, Russell Todd.
- 2015-2017: UWYO School of Energy Resources Graduate Research Assistantship. Angela Benavides.
- 2015: EPSCoR, Undergraduate Research Fellowship, Thoa Pung.
- 2015: EPSCoR, Undergraduate Research Fellowship, Russell Todd.
- 2014-2016: CEAS Excellence Fellowship. Daniel Wilches.
- 2013: **NSF, Graduate Research Fellowship.** Melissa Wiederrecht.
- 2013: UWYO, School of Energy Resources Graduate Research Assistantship. Anh Nguyen.
- 2012: **NSF, Graduate Research Fellowship.** Austin Hayes.
- 2011: EPSCoR, Undergraduate Research Fellowship, Kira Lawrence.

- 2011: EPSCoR, Undergraduate Research Fellowship, Neera Pradhan.
- 2011: **NSF, Graduate Research Fellowship.** Toni Bloodworth.
- 2010: **NSF, Graduate Research Fellowship.** Lauren Cairco.

HOSTED PANELS, TUTORIALS, AND WORKSHOPS WITHIN MY FIELD

- *Led and Organized* "Tutorial on 3DUX: HCI User Experience Design for Immersive Systems and 3D Environments". Amy Banic. (2019). At the HCI International 2019 Conference, Las Vegas, USA, July 2019.
- *Led and Organized* "Tutorial on Bimanual Interaction in Virtual and Augmented Reality". Amy Banic. (2019). At the HCI International 2019 Conference, Las Vegas, USA, July 2019.
- *Led and Co-Organized* "Tutorial on 3D UI/UX Immersive Systems and 3D Environments". Amy Banic. (2018). At the HCI International 2018 Conference, Las Vegas, USA, July 2018.
- *Led and Co-Organized* "Oh the Places You'll Go, in Virtual Reality", Amy Banic and Emma-Jane Alexander, Birds of a Feather, Rocky Mountain Celebration of Women in Computing conference, Salt Lake City Utah, September 23, 2016.
- *Led and Co-Organized* "2nd Workshop on Immersive Volumetric Interaction (WIVI 2014)." Amy Banic, Patrick O'Leary, and Bireswar Laha. (2014). At the IEEE Virtual Reality (VR 2014) conference, Minneapolis, MN, 29-30 March, 2014.
- *Led and Co-Organized* "Tutorial on HCI Design for Immersive Systems and 3D Environments". Amy Banic and Bill Sherman. (2014). At the HCI International 2014 Conference, Crete, Greece, 22-27 June 2014.
- *Led and Co-Organized* "1st Workshop on Mobile Immersive Visualization". Amy Banic, Patrick O'Leary, and Tobias Isenburg. At the ACM MobileHCI 2013 Conference, Munich, Germany, August 27-30, 2013.
- *Led and Co-Organized* "Tutorial on Mobile Interfaces for 3D and Immersive Systems: There's a Mobile App for That!" Amy Banic and Bill Sherman. At the ACM MobileHCI 2013 Conference, Munich, Germany, August 27-30, 2013.
- *Led and Co-Organized* "Tutorial on HCI for 3D and Immersive Systems". Amy Banic and Bill Sherman. At the HCI International 2013 Conference, Las Vegas, Nevada, 21-26 July 2013.
- *Led and Co-Organized* "1st Workshop on Immersive Volumetric Interaction (WIVI 2013).". Amy Banic, Patrick O'Leary, and Zachary Wartell. At the IEEE Virtual Reality (VR 2013) conference, Orlando, FL. 16-23 March, 2013.
- *Co-Organized* "Panel on Engaging Teens in Computing Through Current Passions". Amy Banic, Debra Goldberg, Suzanne Gallagher, and Ruben Gamboa. Rocky Mountain Celebration of Women in Computing 2012 Conference, Fort Collins, CO, November 1-2, 2012.
- *Invited as Panelist for* "Panel on Evolving the IEEE Conference and Building a Career in VR". Panel (organizer: Robert W. Lindeman) Amy Ulinski, Frank Steinicke, John Quarles, and Sean White. at the IEEE Virtual Reality 2009 Conference, Lafayette, LA, USA, March 18, 2009.

AWARD WINNING TALKS

- Ulinski, A. (2007). "Two Hands Up: Exploring Bimanual Task Division for 3D Volumetric Selection" won 3rd Place in Category III: Computer Science at the 7th Annual Niner Research Across the Disciplines Graduate Research Fair, UNC-Charlotte.
- Ulinski, A. (2005). "Effects of Virtual Human Presence on Task Performance" won 2nd Place in Category II in the 5th Annual Niner Research Across the Disciplines Graduate Research Fair, UNC-Charlotte.
- Ulinski, A. (2002). "Give Me a Boost: Ups and Downs in Learning Monotonic Boolean Functions" won the Mathematics Association of America (MAA) Award for Student Presentation at Mathfest 2002.

INVITED TALKS

- Banic, A. (2021). Post-Pandemic Zero UI: Changing the Landscape of Novel Input Devices and Interaction Techniques, Keynote, Workshop on Emerging Novel Input Devices and Interaction Techniques. Workshop hosted by IEEE VR 2021, March 27, 2021, Lisbon, Portugal (Virtual).
- Banic, A. (2018). Magic Hands: From Enhancing Performance of 'Natural' Direct 3D Interaction Techniques to Embracing Spatial and Sensory Approximation in Virtual Reality Environments, ATLAS Institute, University of Colorado Boulder, September 5, 2018.
- Banic, A (2016). "A Day in the 3D Interaction and Agents Research Lab in 5 Minutes", Lighting Talk, Rocky Mountain Celebration of Women in Computing conference, Salt Lake City Utah, September 23, 2016.
- Banic, A. Higher Education Leaders in Advanced Visualization, THE CAAV.
- Banic, A. (2015). "Beyond the Visual in Virtual Reality Experiences: A Focus on Interaction.", CSU Computer Science Colloquium, November 9, 2015.
- Banic, A. (2015). "Cognition as a Performance Metric and User-Control for Navigation in Virtual Reality Environments", CSU Psychology Colloquium, September 10, 2015.
- Banic, A (2014). "Immeraction", Live Telepresence Talk, Immersive Visualization Bootcamp, University of Arkansas, October 23, 2014.
- Banic, A. (2014). "Getting Real About Virtual Reality...for more than gaming", Computer Science Research Seminar, November 11, 2014.
- Banic, A. (2013). "Visualizing the Data Challenge: Benefits, Challenges, and Interaction. Scientific Research for Immersive Visualizations". Research Computing Brown Bag Seminar Series, Shell Visualization Center, Energy Innovation Center, University of Wyoming, November 14, 2013.
- Banic, A. (2013). "Human-Centered Computing Challenges for Interactive Immersive Technologies", Immersive Visualization Bootcamp, UWYO, Laramie, WY, June 2013.
- Banic, A. (2013) "3 Flavors of 3D User Interfaces", Computer Science Faculty Research Seminar Series, Engineering 3070, University of Wyoming, April 19, 2013.
- Banic, A. (2013). "Human-Centered Computing Challenges for Interactive Immersive Technologies", Immersive Visualization Bootcamp, Indiana University, Indianapolis, Indiana, March 2013.
- Ulinski, A. (2011). "Challenges in Interaction for Immersive Visualizations", Colloquium Keynote Speaker, Immersive Visualization Summer Workshop, Center for Advanced Energy Studies, Idaho National Lab, July 21, 2011.

- Ulinski, A. (2011). "Interaction for 3D Visualization", Computer Science Department Colloquium, Colorado State University, May 2, 2011.
- Ulinski, A. (2011). "The Case for Adaptive Interaction for 3D Visualizations", All Things Geography, Department of Geography Brown Bag Series, University of Wyoming, February 25, 2011.
- Ulinski, A. (2010). "Design and Evaluation of Interaction for 3D Visualizations", Data Visualization Research Group Seminar Series, School of Engineering and Applied Sciences, Harvard University, March 23, 2010.
- Ulinski, A. (2009). "Virtual Life: Work and Play" The Department of Mathematics and Computer Science Seminar Series, Duquesne University, April 24, 2009.
- Ulinski, A. (2009). "Bimanual Selection in 3D Volumetric Visualizations" The Division of Visual Computing Seminar Series, School of Computing, Clemson University, February 27, 2009.
- Ulinski, A. (2007). "Grab, Point, Squeeze, or Shrink...Why not? Implications of Selecting in 3D Visualizations of Volumetric Data." The Charlotte Visualization Center Seminar, University of North Carolina at Charlotte, October 18, 2007.
- Ulinski, A. (2006). "Two Hands Up: Exploring Bimanual Task Division for 3D Volumetric Selection Techniques." Graduate Seminar, University of North Carolina at Charlotte, Spring 2006.
- Ulinski, A. (2005). "Overview of Digital Humans and Virtual Environments Research" Freshman Seminar, University of North Carolina at Charlotte, Fall, 2005.
- Ulinski, A. and Zanbaka, C. (2004). "If a digital human gave you a compliment, would it brighten your day?" Center for Human Computer Interaction and 3D Interaction Group, Virginia Tech, October 25, 2004.

HONORS AND AWARDS

- "Going the Extra Mile" award, *recognized for "demonstrating qualities of knowledge, sensitivity and helpfulness in assisting students with disabilities at the University of Wyoming"*, University of Wyoming University Disability Support Services (UDSS), 2017.
- UWYO High-School Summer Institute Faculty Fellow, University of Wyoming, 2011, 2012, 2013, 2014, 2015.
- Essam El-Kwae Student-Faculty Research Award, 2008, College of Computing, University of North Carolina at Charlotte, 2008.
- GAAN Graduate Student Fellowship, UNC-Charlotte, 2008.
- GASP Graduate Fellowship, UNC-Charlotte, 2006, 2007, 2008.
- Giles Graduate Fellowship, UNC-Charlotte, 2004, 2005.
- Duquesne Presidential Merit Scholarship, Duquesne University
- Alcoa Computer Science Scholarship, Duquesne University
- Thomas Winschel Scholarship, Duquesne University
- Pi Mu Espilon Mathematics Fraternity member, Duquesne University
- Omicron Delta Kappa national honors society member, Duquesne University

- Golden Key national honors society member, Duquesne University
- Mortar Board national honors society member, Duquesne University

COURSES TAUGHT AT UNIVERSITY OF COLORADO BOULDER

ATLS-4616/5616, CSCI-4616/5616, Intro to Virtual Reality.
Semesters: Fall 2021.

ATLS-5519, Advanced Special Topics: Research Methods, Co-Taught with Ellen Do and Laura Devendorf
Semesters: Fall 2021.

COURSES TAUGHT AT UNIVERSITY OF WYOMING

COSC 4010/5010, Topics in Computer Science: Virtual Reality Systems.
Semesters: Spring 2013, Spring 2014, Spring 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2021.

COSC 3900, User Interface and User Experience Design (UI/UX Design).
Semesters: Spring 2016, Spring 2017, Spring 2018, Spring 2019.

COSC 4450/5450, Computer Graphics.
Semesters: Fall 2010, Fall 2011, Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2018, Fall 2019, Fall 2020.

ES 1101 Innovation and Entrepreneurship, Spring 2018, Fall 2019, Fall 2020.

COSC 4955, Senior Design II, Spring 2019, Spring 2021.

COSC 4950, Senior Design I, Fall 2018, Fall 2020.

COSC 4010/5010, Topics in Computer Science: Human-Computer Interaction.
Semesters: Spring 2011, Spring 2012, Spring 2013.

COSC 4010: Topics in Computer Science: Child-Centric Interfaces.
Semesters: Spring 2011.

COSC 5000: Seminar: Research Topic Development, Proposal Writing, and Presentations. *Semesters*: Spring 2011, Fall 2012.

GRANTS

- *Pending and Under Review*, NRT-FW-HTF: Virtual Pathways: An Interdisciplinary Approach to Diversifying Research Training of Extended Reality (XR) Technologies to Optimize the Future-of-Work, Co-PI, in collaboration with PI/Co-PIs from Colorado State University, NSF Research Traineeship (NRT), **$2,999,999.**
- 2021-2023: RET Site: WySTACK - Supporting Teachers And Computing Knowledge, Co-PI, NSF RET Site. **$600,000.**
- 2019-2022: REU Site: Design, Create, and Innovate 3-Dimensional User Interfaces to Improve Human Sensory and Motor Performance in Virtual Environments (HUMANS MOVE), PI, NSF REU Site. **$380,000**.
- 2019-2020: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$22,000**.
- 2019, Wyoming INBRE Graduate Assistantship, Wyoming INBRE, $32,164.
- 2018-2019, AY, ACM-W Collaborative Research Experiences for Undergraduates, PI, "Design and Evaluation of Interactive Mixed and Augmented Reality Systems to Improve Spatial Learning Effects when Teaching 3-Dimensional (3D) Spatial Concepts: A Case Study on 3D Neuroanatomy Courses", **$10,500.**
- 2018-2019: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$22,000**.
- 2018-2019, AY, University of Wyoming, IIE Implementation Group, "Center for Design Thinking", a planning grant, Co-PI with Brandon Gellis. **$49,500.**
- 2017-2018: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$28,801**.
- 2016-2017: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$28,801**.
- 2016: NSF SBIR Phase 1, PI, "Adapting Devices for Motion Disabled Users". **$149,864.**
- 2016-2019: DOE WDE MSP, Senior Personnel, "RAMPED: Robotics Applied Mathematics Physics and Engineering Design. **$211,355.**
- 2015-2016: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$28,801**.
- 2015-2016, NSF, PI, "Funding for Student Travel and Doctoral Consortium at the IEEE VR 2015 Conference", **$22,165.**
- 2015: UWYO Seed Funding, PI, "Coordinated Two-Handed Motion to Improve Gesture Based Interaction Design". **$24,993.**
- 2014-2015: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$28,801.**

- 2014-2016: UW Engineering Tier 1 Initiative Cluster, Co-PI. "Wyoming High Performance Computational Science and Engineering Cluster". **$452,942.** *Funding for one CEAS Excellence Fellowship for two-five years.*
- 2014-2016: UWYO Graduate Mentoring Initiative, Co-PI. **$21,060**.
- 2013-2014: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$27,054.**
- 2013: NSF SBIR Phase 0, Consultant, "Adapting Touchscreen Devices for Motion Disabled Users". **$5000.**
- 2013-2015: UWYO Graduate Mentoring Initiative, Co-PI. **$21,060**.
- 2012-2013: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$27,054.**
- 2011-2013: Battelle Energy Alliance, LLC. (BEA) LDRD, PI, "User Interface and Interaction Techniques for Handheld Displays with an Immersive Display". **$154,184.**
- 2011-2012: AHRQ Small Research Grant Program (R03), Senior Personnel, "Enhancing Patient Safety for Nurses through Virtual Pediatric Patient Interaction". **$99,931.**
- 2011-2012: Battelle Energy Alliance, LLC (BEA), PI, Joint Appointment with Idaho National Lab. **$27,054.**
- 2009-2010: Clemson University International Center for Automotive Research (CU-ICAR), "Demonstration of Augmented Reality in Inspection". **$53,754.**

ADVISING

Current Ph.D. Students:
- Russell Todd
- Simon Alexander
- Milana Wolff
- Connor Kasarda
- Rebecca Austin

Current M.S. Students:

Current Undergraduate Students:
- Kyler Freeman
- Jacob Bahr
- Jacob Karen
- Christine Wang
- Ashlyn Lindsay
- Kelly Castle
- Heather Wegner
- Pablo Solano
- Duke Tran
- Beatriz Mattingly-Borjas
- Alexis Perez
- Kaelynn Vick

- Jenna LaPierre
- Lindsey Belmonte
- Bridget Humphries
- Kayla Stenberg

Completed Ph.D. Students:

- Rajiv Khadka

Completed M.S. Students:

- Anushka Godse, MS Thesis
- Angela Benavides, MS Thesis
- Daniel Wiches, MS Thesis
- Fangzhou Bou, MS Thesis
- Nikhil Shetty, MS Thesis
- Aditi Anand, MS Thesis
- Neera Pradhan, MS Thesis
- Lionel Sakou, MS Thesis
- Anh Nguyen, MS Thesis
- Zhibo Sun, MS Plan B
- S Kanakadandi, MS Plan B
- Yousef Asiri, MS Thesis
- Nattaya Arrejitkasem, MS Thesis
- Justin Loyd, MS Thesis
- Lana Jaff, MS Thesis
- Ashish Dhital, MS Thesis
- John Dumke, MS Plan B

OUTREACH

- Led (and continue to lead) a team of Research Experiences for Undergraduates (REU) students, where a number of them are women and other underrepresented minorities, each summer since 2007-present, funded by UWYO, EPSCoR, CRA-W DREU and currently NSF REU Site.
    - NSF REU Site: REU HUMANS MOVE Mentor for 10 students each year.
    - UWYO CEAS Research Experiences for Undergraduates (REU) Mentor for 4 students (2 Female, 2 male underrepresented minorities) from University of Wyoming, summer 2019.
    - CRA Distributed Research Experiences for Undergraduates (REU) Mentor for two male underrepresented minority undergraduate students from College of William and Mary and Morehouse College, Summer 2013.
    - CRA Distributed Research Experiences for Undergraduates (REU) Mentor for two female undergraduate students from Wheaton College and Alabama A&M University, Summer 2011.

    - University of Wyoming EPSCoR Research Experiences for Undergraduates (REU) Advisor for two female undergraduate students from UW, Summer 2011.
- Co-developed and co-taught a course 2010-2015 on "Generative Art in a Virtual World" for UW High School Summer Institute, which engages students in computing through visual arts, peer programming, and remote participation among rural teens in Wyoming.
- Initiated student-run group, InnoVRtors, to group and explore VR projects. Future goal to expand to high school and middle school groups.
- Received the Essam El-Kwae Student-Faculty Research Award in 2008 in recognition of mentoring contributions.
- Committed to broadening the participation of groups underrepresented in computer science, including active recruitment of underrepresented groups in computing, and serving undergraduates by offering research opportunities.
- Served as general chair for Rocky Mountain Celebration of Women in Computing 2014.

SERVICE WITHIN RESEARCH FIELD

- Member, Organizing Committee, The Higher Education Campus Alliance for Advanced Visualization™, 2015-present.
- International Program Committee for Journal and Conference papers, IEEE Virtual Reality, 2017, 2018, 2019, 2021.
- Panels Chair, IEEE Virtual Reality, 2019.
- Research/Industry Demos Chair, IEEE Virtual Reality 2016.
- International Program committee, ACM Symposium on Spatial User Interfaces (SUI), 2016.
- Posters Chair, IEEE Symposium on Three Dimensional User Interfaces 2016.
- General Chair, ACM Symposium on Spatial User Interfaces (SUI 2015), 2014-2015.
- General Co-Chair, ACM Rocky Mountain Celebration of Women in Computing Conference (RMCWIC 2014), 2012-2014.
- Posters Chair, IEEE Symposium on Three Dimensional User Interfaces (3DUI 2014), 2013-2014.
- Workshops Chair, IEEE Virtual Reality (VR 2014), 2013-2014.
- Conference Program Committee, Papers Coordinator, IEEE Symposium on Three Dimensional User Interfaces (3DUI), 2012-2014.
- Research/Industry Demos Chair, ACM SUI Symposium, 2012-2013.
- Reviewer, IEEE Virtual Reality Conference 2008-2015.
- Reviewer, IEEE Symposium on Three Dimensional User Interfaces (3DUI), 2008-2015
- Conference Committee 3DUI Contest Co-Chair, IEEE 3DUI Symposium, 2011-2012.
- NSF Panelist, Proposal Reviewer, 2011.
- Conference Committee Student Volunteer Chair, IEEE VR 2010-2011.

- Program Committee Member, IEEE Symposium on Three Dimensional User Interfaces (3DUI), 2011.
- Best Paper Judge, Colorado Celebration of Women in Computing, 2010.
- NSF Panelist, Proposal Reviewer, Spring 2010.
- Reviewer, ACM Symposium on Virtual Reality Software and Technology (VRST), 2009, 2010
- Conference Committee Student Volunteer Co-Chair, IEEE VR 2009-2010.
- Panelist, IEEE Virtual Reality 2008: Evolving the IEEE VR Conference
- Student Volunteer, ACM Symposium on Virtual Reality Software and Technology (VRST), 2007
- Student Volunteer, IEEE Virtual Reality, 2006, 2007
- Student Volunteer, 5th International Workshop on Virtual Rehabilitation (IWVR), 2006
  Student Volunteer, HCI-International conference, 2005

UNIVERSITY SERVICE

- Member, Technical Steering Committee Shell 3D Visualization Center, 2016- Present.
- Member, Committee for writing NSF IT ADVANCE proposal and Advocates for Women's Advancement and Research Center (WARC), 2013- 2018.
- Member, UW Research Computing Committee, UW Scientific Computing Task Force, U. of Wyoming, 2010- 2016.
- Member, UW College of Engineering and Applied Sciences CEAS Dean Search Committee, 2014.
- Member, UW SER Visualization Center Research Scientist/ Manager Position Search Committee, U. of Wyoming, 2013.
- Member, UW SER Visualization Center Equipment Planning Committee, U. of Wyoming, 2011-2012.
- Member, Clinical Research Problem Committee, Valerie Bradley, Pediatric Virtual Patients, Clemson University, 2009
- Panel Leader, Graduate Student Open House, UNC-Charlotte, 2008
- Active in recruiting and providing demonstrations to visitors, Clemson University, 2009.
- Active in recruiting and providing demonstrations to visitors, UNC-Charlotte, 2003, 2004, 2005, 2006, 2007, 2008.

COLLEGE AND DEPARTMENT SERVICE

- Co-Director, Center for Design Thinking, a Collaboration between College of Eng. and Applied Science and College of Visual and Literary Arts, 2018-present.

- Member, Graduate Curriculum and Improvement Committee, Department of Computer Science, U. of Wyoming, 2011-Present.
- Member, COSC Student Recruitment Committee, Department of Computer Science, U. of Wyoming, 2019.
- Member, Engineering Building Leadership Committee, College of Engineering and Applied Science, 2015-2018.
- Co-PI, Graduate Mentorship Improvement Proposal, Department of Computer Science, U. of Wyoming, 2013.
- Member, Faculty Recruiting Committee, Department of Computer Science, U. of Wyoming, 2011-2012.
- Member, Undergraduate Curriculum Committee, Department of Computer Science, UNC-Charlotte, 2007-2008
- Co-Adviser, Undergraduate Computer Science Senior Project, Adam Fogle, Clemson University, 2009.
- Member, UWYO CEAS Dean Search Committee, 2014.
- Lab Demos, Discovery Days, 2011, 2012, 2013, 2014.
- Assisted with identifying physical space needs of college, College of Engineering and Applied Science, U. of Wyoming, 2011.
- Research Laboratory Demonstrations, CEAS Open House, College of Engineering and Applied Science, U.of Wyoming, 2011.
- Member, Graduate Recruitment Committee, College of Computing, Clemson University, 2009.
- Panelist, College of Computing and Informatics, Graduate Student Open House, UNC-Charlotte, 2007.
- Panelist, College of Computing and Informatics, Graduate Student Open House, UNC-Charlotte, 2006.

PRESS COVERAGE

- **Foresight Magazine,** Leading the Way, *personally featured on page 7*, https://issuu.com/uwyo/docs/foresight_sp21_web
- **Wyoming Public Radio,** University Of Wyoming Lab Improves Virtual Reality Simulations, https://www.wyomingpublicmedia.org/science/2021-03-05/university-of-wyoming-lab-improves-virtual-reality-simulations
- **MIT Technology Review,** http://www.technologyreview.com/view/528751/howanintelligentthimblecouldreplacethemousein3dvirtualrealityworlds/
- **Slashdot,**http://slashdot.org/submission/3681651/howanintelligentthimblecouldreplacethemouseindvirtualrealityworlds

- **Atmel**,http://atmelcorporation.wordpress.com/2014/07/09/3dtouchisthefuturecomputermouse/
- **Fast Company**, http://www.fastcodesign.com/3032820/isasmartthimblethecomputermouseofthefuture
- **CE**,http://www.crazyengineers.com/threads/3dtouchthewearableinputdevicethatmaykillthegoodolmouse.75749/
- **IFL Science**,17M, http://www.iflscience.com/technology/3dtouchworks3dimensionscouldreplacecomputermouse
- **Wired**,http://archive.wired.com/beyond_the_beyond/2014/07/augmentedreailtyfingertipmountedbat/; http://popularnews24.com/video3dtouchworksin3dimensionscouldreplacethecomputermouse/
- **Crazy Engineers,** http://www.crazyengineers.com/threads/3dtouchthewearableinputdevicethatmaykillthegoodolmouse.75749/
- **DailyMail**,http://www.dailymail.co.uk/sciencetech/article2684639/DeathcomputermouseDevicereplacedsmartTHIMBLE.html
- **MSN**,http://news.uk.msn.com/commentandanalysis/3dtouchsmartthimblecouldreplacemouse%E2%80%93video
- **TheWeek**,http://www.theweek.co.uk/technology/59377/3dtouchsmartthimblecouldreplacemousevideo
- **News2Co.UK**,http://news2.co.uk/uknews/willthesmartthimblereplacethecomputermouse
- **Metro**,http://metro.co.uk/2014/07/09/willthesmartthimblereplacethecomputermouse4792282/
- **NewsReality**, http://www.newsreality.com/post/is3dtouchthedeathofthecomputermouse
- **Data Center Management**, http://www.datacentremanagement.org/2014/07/howanintelligentthimblecouldreplacethemousein3dvirtualrealityworlds/
- **MarXiv org,** http://marxivorg.lieblich.us/?query=id%3A1406.5581&page=0&type=search; http://6spot.net/reviews/howsmartcanreplace3dvirtualrealityworldsthemousethimble/
- **Belfast Telegraph**, http://www.belfasttelegraph.co.uk
- **Australia,** http://www.sciencealert.com.au/news/2014100725853.html
- **India,** http://www.deccanherald.com/content/418906/wearabledevicemayspellend.Html; http://ibnlive.in.com/news/anewwearabledevicethatcanmaketheindispensablecomputermouseobsolete/48504311.html;http://www.financialexpress.com/news/wearabledevicemayspellendofcomputermouse/1268602;http://www.youngisthan.in/mobilecomputers/deathofcomputermouseourfingerswilldothemagic/8158;http://timesofindia.indiatimes.com/tech/moregadgets/Thisdevicemaykillcomputermouse/articleshow/38134428.cms?;http://www.hindust

antimes.com/technology/gadgetsupdates/wearabledevicemayspellendofcomputermouse/article11238901.aspx;http://www.mumbaimirror.com/others/scitech/Smartthimblecouldreplacethemouse/articleshow/38162283.cms;http://www.punemirror.in/others/scitech/Smartthimblecouldreplacethemouse/articleshow/38146866.cms;http://economictimes.indiatimes.com/panache/goodbyecomputermousehello3dtouch/articleshow/38533382.cms;http://www.techtree.com/content/news/6833/endmousecomes3dtouch.html;http://www.digit.in/wearabledevices/anintelligentthimblecouldmakethecomputermouseobsolete23242.html;http://www.nagpurtoday.in/itsendofroadforyourcomputermouseherecomes3dtouchtoeaseyourtask/

- **Germany**, http://www.vrnerds.de/3dtouchfingerhutmaus/
- **Russia,**http://www.novostiit.net/kakumnyiynaperstokmozhetzamenitmyishv3dmirahvirtualnoyrealnosti0008581; http://www.computerra.ru/102244/3dtouch/RoboCraft; http://robocraft.ru/blog/projects/3148.html
- **Turkey,** http://www.haber3.com/farelertariholuyor2781513h.htm
- **Language: Spanish,** http://wwwhatsnew.com/2014/07/14/3dtouchunratonparaaplicaciones3d/; http://www.technologyreview.es/blog/post.aspx?bid=359&bpid=30531
- **Language: Polish,** http://whatnext.pl/3dtouchpracujetrzechwymiarachmozezastapicmyszkekomputerowa/
- **Language: Portugese,** http://museudoamanha.org.br/3demnossasmaosofuturodomouse/