# **AARON GLUCK, Ph.D.**

### **CURRICULUM VITAE**

Clinical Assistant Professor Games, Interactive Media, and Mobile Technology College of Arts and Sciences Boise State University aarongluck@boisestate.edu www.aarongluck.com

Aaron Gluck, Ph.D., researches the accessibility of commercial off-the-shelf virtual reality (VR) hardware and applications for older adults and people with disabilities and explores the benefits VR usage can provide these populations. Additionally, he is passionate about teaching and encouraging future generations of VR researchers and developers to think beyond themselves and embrace inclusive design so that VR may become accessible for all.

**Research Areas:** Human-computer interaction, virtual reality, accessibility, user interface design, user experience, game design, serious games, virtual simulations, human-machine interfaces, 3D printing for accessibility, and automated driving systems

#### **EDUCATION**

# Clemson University, Clemson, SC

2023

- Ph.D. in Human-Centered Computing
  - o Dissertation: Accessible Virtual Reality for Older Adults
  - Advisor: Dr. Julian Brinkley

# Boise State University, Boise, ID

2019

- B.S. in Gaming, Interactive Media, and Mobile Technology (GIMM)
- Magna Cum Laude
  - Dean's List with Highest Honors

2016 - 2019

# Santa Barbara City College, Santa Barbara, CA

2002

- A.A. in Liberal Studies
- Honors
  - o President's Honor Roll

2000 - 2002

#### **EMPLOYMENT**

# Boise State University, Boise, ID

- Gaming, Interactive Media, and Mobile Technology (GIMM)
  - Clinical Assistant Professor

2023 - Present

- Courses Taught:
  - GIMM 200: Visual Storytelling and UX
  - GIMM 350: Game Development
  - GIMM 400: Special Topics: Multiplayer Game Dev
  - GIMM 440: Digital Portfolio

o Dev Team 2018

- Project management for developing a VR experience on eating disorders
- Translating client's 2D art into a 3D environment with audio storytelling
- Client meetings, team leading, planning, prototyping, and coding
- o Peer Mentor 2017
  - Taught coding mini-classes
  - Tutoring, mentoring, and counseling fellow GIMM majors
  - Assisted in organizing and running the GIMM computer lab for students and guests

### Clemson University, Clemson, SC

- School of Computing: Human-Centered Computing Division
  - Graduate Research Assistant: Lab Lead

2022 - 2023

- Mentoring lab members on research skills and qualitative data analysis
- Assisted with proposal and grant writing
- Establishing relationships with organizations serving older adults
- Graduate Research Assistant

2019 - 2022

- Conducted qualitative research studies with older adults and people with disabilities
- In-person and remote participatory design, focus groups, user enactment, and surveys
- Research study planning, development, leading, results analysis, and paper writing
- Physical and digital prototyping

### GE Global Research Center, Niskayuna, NY

- FORGE Lab
  - VR/AR Graduate Research Intern

2020

- Lead intern on VR military training application project
- Developed AI enemy realistic sight and human-drone cooperative teamwork
- Researched current published VR training methodologies

#### **PUBLICATIONS**

#### **Journal Publications:**

- [J.2] Deng. M., **Gluck. A.**, Zhao. Y., Li. D., Menassa. C., Kamat. V. and Brinkley, J. (2024). An Analysis of Physiological Responses as Indicators of Driver Takeover Readiness in Conditionally Automated Driving. *Accident Analysis & Prevention 195, 107372*.
- [J.1] **Gluck, A.**, Brinkley, J. (2020). Implementing 'The Enclosing Dark': A VR Auditory Adventure. *Journal on Technology and Persons with Disabilities 8, pp. 149-159*.

#### **Refereed Conference Proceedings**

[C.16] Brinkley, J., Huff, E., **Gluck, A.**, Enam, A. (2024) An Autoethnographic Study of the Waymo One Autonomous Ridesharing Ecosystem: Exploring Issues of Accessibility. *IEEE International Conference on Human-Machine Systems (ICHMS)*. (To Appear)

- [C.15] Lawson, C., Enam, A., **Gluck, A.**, Brinkley, J. (2024). Experiencing Start With One: Increasing Black Student Interest in Graduate Computer Science Education Using Accessibility Workshops. *Black Issues in Computing Education Symposium (BICE)*. (To Appear)
- [C.14] **Gluck, A.**, Golba, E., and Brinkley, J. (2023). Development of a VR Head-mounted Display Strap Modification for Use by Individuals with a Cochlear Implant. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- [C.13] Rupp, M., **Gluck, A.**, Derby, J., Gable, T., Kelling, N., and Van Ommen, C. (2023). Towards Making XR 100% Accessible: A Discussion Panel. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- [C.12] Bastola, A., Enam, A., **Gluck, A.**, Bastola, A., and Brinkley, J. (2023). Multi-functional Glasses for the Blind and Visually Impaired: Design and Development. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- [C.11] **Gluck, A.**, Solini, H., Maiti, K., Brinkley, J. (2022). Evaluating 3D Printed VR Controller Prototypes to Increase VR Accessibility for Older Adults. In *2022 IEEE 3rd International Conference on Human-Machine Systems* (ICHMS) (pp. 1-6). IEEE.
- [C.10] **Gluck, A.**, Deng, M., Zhao, Y., Menassa, C., Li, D., Brinkley, J., Kamat, V. (2022). Exploring Driver Physiological Response During Level 3 Conditional Driving Automation. In *2022 IEEE 3rd International Conference on Human-Machine Systems* (ICHMS) (pp. 1-5). IEEE.
- [C.9] Brinkley, J., Huff, E., **Gluck, A.** (2022). Design Techniques for Exploring Accessible Human-Autonomous Vehicle Interaction in the Age of Vehicular Autonomation. In *2022 IEEE 3rd International Conference on Human-Machine Systems* (ICHMS) (pp. 1-10). IEEE.
- [C.8] **Gluck, A.**, Brinkley, J., Huff, E., Boateng, K. (2022). Toward a Framework for Embodiment in Emerging Transportation Technologies for Facilitating In-Vehicle Experiences for Vulnerable and Disabled Road Users. In *2022 IEEE 3rd International Conference on Human-Machine Systems* (ICHMS) (pp. 1-5). IEEE.
- [C.7] **Gluck, A.**, Solini, H., Brinkley, J. (2022). It's Enactment Time!: High-fidelity Enactment Stage for Accessible Automated Driving System Technology Research. In *The 24th International ACM SIGACCESS Conference on Computers and Accessibility* (pp. 1-9).
- [C.6] Spain, R., Bailey, S., Goldberg, B., Sail, R., Carmody, K., Ficke, C., Bayro, A., Jeong, H., Kim, J., Yeo, W., Figueroa, R., Pugh, Z., Mayhorn, C., **Gluck, A.**, Beadle, S., Bond, A. (2022). Me and My VE 2022: Human Factors Applications Using Virtual Reality, Mixed Reality, and Virtual Environments. In *Proceedings of Human Factors and Ergonomics Society Annual Meeting* (Vol. 66, No. 1, pp. 2188-2192).).
- [C.5] **Gluck, A.**, Boateng, K., Brinkley, J. (2021). Racing in the Dark: Exploring Accessible Virtual Reality by Developing a Racing Game for People who are Blind. In *Proceedings of Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1, pp. 1114-1118).

- [C.4] Huff Jr., E., **Gluck, A.**, Boateng, K., Brinkley, J. (2021). The Daily Experiences of Facebook for Visually Impaired Users. In *Proceedings of Human Factors and Ergonomics Society Annual Meeting* (Vol. 65, No. 1, pp. 221-225).
- [C.3] Carvalho, S., **Gluck, A.**, Quinn, D., Zhang, M., Li, L., Groves, K., Brinkley, J. (2021). An Accessible Autonomous Vehicle Ridesharing Ecosystem. In *Proceedings of Human Factors and Ergonomics Society Annual* Meeting (Vol. 65, No. 1, pp. 342-346).
- [C.2] **Gluck, A.**, Huff Jr., E., Zhang, M., Brinkley, J. (2020). Lights, Camera, Autonomy! Enacting Expected Activities in an Imaginary Autonomous Vehicle. In *Proceedings of Human Factors and Ergonomics Society Annual Meeting* (Vol. 64, No. 1, pp. 1971-1975).
- [C.1] **Gluck, A.**, Boateng, K., Huff Jr., E, Brinkley, J. (2020). Putting Older Adults in the Driver Seat: Using User Enactment to Explore the Design of a Shared Autonomous Vehicle. In 12<sup>th</sup> International Conference on Automotive User Interfaces and Interactive Vehicular Applications (pp. 291-300).

# **Refereed Conference Posters (Peer Reviewed)**

- [RCP.2] Bastola, A., **Gluck, A.**, and Brinkley, J. (2023). Feedback Mechanism for Blind and Visually Impaired: A Review. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- [RCP.1] **Gluck, A.**, Chen, J., Paul, R. (2020). Artificial Intelligence Assisted Virtual Reality Warfighter Training System. *In 2020 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR)* (pp. 386-389). IEEE.

# **Refereed Conference Workshop Papers (Peer Reviewed)**

- [RCW.2] **Gluck, A.**, Huth., A. (2024) Supporting Individuals with Photophobia in VR: A Case Study of VR Shades, an Accessible VR Application Feature Prototype. 2024 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW) IDEATEXR Workshop. (To Appear).
- [RCW.1] **Gluck, A.**, Solini, H., Maiti, K., Brinkley, J. (2024). Don't Forget Our Presence: Exploring VR for Older Adults. 2024 *IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW) IDEATEXR Workshop. (To Appear).*

### **Manuscripts Under Review**

- [MUR.2] Enam, Md A., Brinkley, J., **Gluck, A.** (2024). Differing opinions of people with and without disabilities on the same inclusive internal human machine interface of autonomous vehicles. *The 2024 ACM CHI conference on Human Factors in Computing Systems*.
- [MUR.1] Solini, H., **Gluck, A.**, Pagano, C. (2023). Speed-Accuracy Tradeoff in Corner Negotiation. *Human Factors: The Journal of the Human Factors and Ergonomics Society.*

### **Manuscripts in Preparation**

- [MUR.3] Murmu, C., Kohm, K., Solini, H., **Gluck, A.**, Venkatakrishnan, R., Venkatakrishnan, R., Pagano, C., Robb, A., Babu, S. (2024). Evaluating the Effects of Steering Metaphor and Field of View on Navigation in Virtual Reality through the Lens of Fitts' Law.
- [MiP.2] **Gluck, A.**, Solini, H., Brinkley, J. Accessible Virtual Reality for Older Adults: Accessibility Barriers and Prototypes.
- [MiP.1] Solini, H., **Gluck, A.**, Pagano, C. Cutting Corners: The Role of Corner Geometry in Virtual Teleoperation Performance.

### **REPORTS**

[R.1] Deng, M., **Gluck, A.**, Menassa, C., Kamat, V., Li, D., Brinkley, J. (January 2024). *Predicting Driver Takeover Performance in Conditional Automation (Level 3) through Physiological Sensing*. Center for Connected and Automated Transportation. University of Michigan.

#### **DATA SETS**

[DS.1] Deng, M., **Gluck, A.**, Menassa, C., Kamat, V., Li, D., Brinkley, J., Zhao, Y. (October 2023). *Data for Predicting Driver Takeover Performance in Conditional Automation (Level 3) through Physiological Sensing [supporting dataset]*. Transportation Research Information Services Database.

#### **CONFERENCE PRESENTATIONS**

- [CP.11] **Gluck, A.**, Golba, E., and Brinkley, J. (October 2023). *Development of a VR Head-mounted Display Strap Modification for Use by Individuals with a Cochlear Implant*. 67th Annual Meeting of the Human Factors and Ergonomics Society. Washington, DC.
- [CP.10] **Gluck, A.**, Solini, H., Maiti, K., Brinkley, J. (November 2022). *Evaluating 3D Printed VR Controller Prototypes to Increase VR Accessibility for Older Adults*. 2022 IEEE International Conference on Human-Machine Systems. Gainesville, Florida (Virtual).
- [CP.9] **Gluck, A.**, Deng, M., Zhao, Y., Menassa, C., Li, D., Brinkley, J., Kamat, V. (November 2022). *Exploring Driver Physiological Response During Level 3 Conditional Driving Automation*. 2022 IEEE International Conference on Human-Machine Systems. Gainesville, Florida (Virtual).
- [CP.8] Brinkley, J., Huff, E., **Gluck, A.** (November 2022). *Design Techniques for Exploring Accessible Human-Autonomous Vehicle Interaction in the Age of Vehicular Autonomation*. 2022 IEEE International Conference on Human-Machine Systems. Gainesville, Florida (Virtual).

- [CP.7] **Gluck, A.**, Brinkley, J., Huff, E., Boateng, K. (November 2022). *Toward a Framework for Embodiment in Emerging Transportation Technologies for Facilitating In-Vehicle Experiences for Vulnerable and Disabled Road Users*. 2022 IEEE International Conference on Human-Machine Systems Systems. Gainesville, Florida (Virtual).
- [CP.6] **Gluck, A.**, Solini, H., Brinkley, J. (October 2022). *It's Enactment Time!: High-fidelity Enactment Stage for Accessible Automated Driving System Technology Research.* 24th International ACM SIGACCESS Conference on Computers and Accessibility. Athens, Greece.
- [CP.5] Spain, R., Bailey, S., Goldberg, B., Sall, R., Carmody, K., Ficke, C., Bayro, A., Jeong, H., Kim, J., Yeo, W., Figueroa, R., Pugh, Z., Mayhorn, C., **Gluck, A.**, Beadle, S., Bond, A. (October 2022). *Me and My VE 2022: Human Factors Applications Using Virtual Reality, Mixed Reality, and Virtual Environments*. 66th Proceedings of Human Factors and Ergonomics Society Annual Meeting. Atlanta, Georgia.
- [CP.4] **Gluck, A.** (October 2021). Racing in the Dark: Exploring Accessible Virtual Reality by Developing a Racing Game for People who are Blind. 65th Annual Meeting of the Human Factors and Ergonomics Society. Baltimore, Maryland.
- [CP.3] **Gluck, A.** (October 2021). *An Accessible Autonomous Vehicle Ridesharing Ecosystem*. 65th Annual Meeting of the Human Factors and Ergonomics Society. Baltimore, Maryland.
- [CP.2] **Gluck, A.** (October 2020). *Lights, Camera, Autonomy! Enacting Expected Activities in an Imaginary Autonomous Vehicle*. 64th Annual Meeting of the Human Factors and Ergonomics Society. Virtual.
- [CP.1] **Gluck, A.** (September 2020). *Putting Older Adults in the Driver Seat: Using User Enactment to Explore the Design of a Shared Autonomous Vehicle*. 12th Annual Conference on Automotive User Interfaces and Interactive Vehicular Applications. Virtual.

#### **INVITED SEMINARS**

[IS.1] Dagstuhl Seminar 24371 (September 2024). Extended Reality Accessibility. Scholoss Dagstuhl – Leibniz Center for Informatics. Wadern, Germany. (To Attend)

#### **INVITED PANELS**

- [IP.3] Cano, J., **Gluck, A.,** Huth, L., Jean-Louis, J. (March 2024). *Next-Level XR: People with Disabilities Unlocking New Worlds*. 2024 South by Southwest (SXSW) Conference XR Track Panel Session. Austin, TX. (To Attend)
- [IP.2] Rupp, M., **Gluck, A.**, Derby, J., Gable, T., Kelling, N., Van Ommen, C. (October 2023). *Towards Making XR 100% Accessible: A Discussion Panel*. 67th Annual Meeting of the Human Factors and Ergonomics Society. Washington, DC.

[IP.1] Curtis-Davidson, B., Huth, A., Biggs, B., **Gluck, A.**, and Logan, T. (December 2022). *Virtual reality and Inclusion: What does non-visual access to the metaverse mean?* Sight Tech Global. Vista Center. Virtual.

#### **GUEST LECTURES**

- [GL.3] **Gluck, A.** (August 2022). *Unity Demo*. Course: Special Topic: Game Design. Clemson University, Clemson, SC.
- [GL.2] **Gluck, A.** (September 2021). *Accessible Technologies for Older Adults*. Course: Inclusive Design and Accessibility Technologies. Hybrid: Clemson University, Clemson, SC and virtual.
- [GL.1] **Gluck, A.** (April 2021). *Gamification*. Course: Creating A Smartphone App for the Clemson Extension Health Program's WalkSC Step Initiative. Virtual.

#### **PRESENTATIONS**

- [P.6] **Gluck, A.** (January 2023). *Non-Visual Information for Accessible VR*. "Virtual and Augmented Reality in Vocational Training and Education." Second Virtual Reality For Visually Impaired People (VR 4 VIP) Online Conference. Virtual.
- [P.5] Deng, M., Menassa, C., **Gluck, A.**, Li, D., Zhao, Y., Brinkley, J., and Kamat, V. (March 2022). *Can Physiological Sensing Indicate Driver Takeover Abilities in Conditional Level 3 Autonomation?*Center for Connected and Automated Technology (CCAT) Research Review. Virtual.
- [P.4] **Gluck, A.** (November 2021). *Accessible VR for Older Adults*. Research presentation at Virtual Reality Day '21. Virtual.
- [P.3] Huff Jr., E. and **Gluck, A.** (November 2021). *Accessibility and Technology for Social Good*. Research presentation to the Clemson University local Human Factors and Ergonomics Society chapter. Hybrid: Clemson University, Clemson, SC and virtual.
- [P.2] **Gluck, A.** (September 2021). *Virtual Reality in the Dark: VR Development for People who are Blind*. Research presentation to the A11YVR monthly meetup in virtual reality. Virtual.
- [P.1] **Gluck, A.** (October 2020). *Accessibility: Research and VR*. Research presentation to Boise State University senior undergraduate students in the Gaming, Interactive Media, and Mobile Technology major. Virtual.

#### CONFERENCE WORKSHOPS

[CW.1] **Gluck, A.**, Upasani, S., Gonzales, A., Ransing, V., Raghuraman, R., Doty, K., Brinkley, J. (October 2022). *Inclusive Design Mini-Workshop*. The 66th Human Factors and Ergonomics Society Annual Meeting. Atlanta, Georgia.

#### **DEMONSTRATIONS**

[D.1] **Gluck, A.** (October 2022). *Demonstration: Exploring a Non-Visual First Person-Oriented VR Environment Through Haptic and Auditory Feedback*. Me and My VE 2022: Human Factors Applications Using Virtual Reality, Mixed Reality, and Virtual Environments at the 66th Human Factors and Ergonomics Society Annual Meeting. Atlanta, Georgia.

#### **TEACHING EXPERIENCE**

### **Boise State University**

- Undergraduate Level Teaching
  - o Fall 2023
    - GIMM 350: Game Development (3 cr.). School of the Arts, Boise State University
      - 49 Students: Student Evaluation 4.57/5
    - GIMM 400: Special Topics: Multiplayer Game Dev (3 cr.). School of the Arts, Boise State University
      - 42 Students: Student Evaluation: 4.74/5
  - Spring 2024
    - GIMM 200: Visual Storytelling & UX (3 cr.). School of the Arts, Boise State University
      - 22 Students
    - GIMM 440: Digital Portfolio (3 cr.). School of the Arts, Boise State University
      - 40 Students

# **New Workshop Development**

•	Clemson Computing Inclusion and Identity (CCII) Workshop Program	Fall 2022
•	Inclusive Design Mini-Workshop for HFES Student Career Day Session	Fall 2022
•	Start with One: Four-part Workshop Series on Inclusive Design	Spring 2022

#### **Clemson University**

- Clemson Computing Inclusion and Identity (CCII) Program Research and Design Workshop Series: Five-part Workshop Series
  - o Teaching the development of assistive technologies via design, prototyping, and evaluation
  - 15 attendees
  - Partnership with the International Society for Black in Computing (ISBIC)
  - Funded through a Google ExploreCSR award
- CPSC 1990: Start with One (Creative Inquiry)

Spring 2022

- Teaching designing and prototyping technologies for persons with disabilities
- o 3 students
- Start with One: Four-part Workshop Series

Spring 2022

- o Teaching inclusive design with older adult co-designers using participatory design
- o 21 student attendees and 10 co-designers per workshop
- Funded through a Google ExploreCSR award

# **Human Factors and Ergonomics Society**

• Inclusive Design Mini-Workshop

- Fall 2022
- Teaching the inclusive design process from the initial co-designer interview through initial solution development
- Developed a virtual co-designer for participants to interview and build an accessible solution that solves a need for the co-designer and increases quality of life
- 44 graduate student attendees
- o Workshop requested by HFES Student Career Day leadership

# **FACULTY DEVELOPMENT**

Boise State University				
Faculty Learning Community about Service-Learning	2023-2024			
<ul> <li>Designing Your Syllabus for Student Success</li> </ul>	2023			
Choosing the Right Active Learning Strategies	2023			
<ul> <li>New Faculty Research and Creative Activity Orientation</li> </ul>	2023			
Reflecting on Evidence of Teaching	2023			
VIRTUAL REALITY PROJECT BUILDS				
Clemson University DRIVE Lab, Clemson, SC				
<ul> <li>Accessible VR Hidden Object Search (Dissertation)</li> </ul>	2022 – 2023			
<ul> <li>On Device Accessible User Profile (Dissertation)</li> </ul>	2022 – 2023			
<ul> <li>Shot in the Dark: A VR Accessible First-Person Shooter Prototype</li> </ul>	2022			
<ul> <li>Evaluation of VR Targeting Methods for People Who Are Blind</li> </ul>	2022			
<ul> <li>Racing in the Dark: A VR Accessible Racing Game</li> </ul>	2020 – 2021			
Clemson University Course Projects, Clemson SC				
Accessible VR for People with Quadriplegia (Tangible Embodied Interfaces)	Spring 2022			
Salmon Simulator (Virtual Reality Systems)	Spring 2020			
CE Clabal Bassayah Cantan Niekawaa NV				
GE Global Research Center, Niskayuna, NY				
VR Warfighter Training Simulation	2020			
Laughing Lance Studios, Clemson, SC				
<ul> <li>VR Shades: Accessible VR Application Feature Prototype</li> </ul>	2023 – Present			
The Enclosing Dark: A VR Auditory Adventure	2019 – Present			
Boise State University, Boise, ID				
Gaming, Interactive Media, Mobile Technology				
<ul> <li>Codex Fejérváry-Mayer – BSU World Museum VR Experience</li> </ul>	2018 – 2019			
Reflection Arcade	2017 – 2019			
Dev Club				
<ul> <li>Droid Slam! – Lead Developer</li> </ul>	2018			

# NON-VIRTUAL REALITY PROJECT BUILDS

<ul> <li>Clemson University DRIVE Lab, Clemson, SC</li> <li>Accessible In-Vehicle Human-Machine Interfaces (ATLAS II, AIVA, EVIE)</li> <li>VR Head-mounted Display Strap Modification (Dissertation)</li> <li>VR Handheld Controller Modifications (Dissertation)</li> </ul>	2022 - 2023 2022 - 2023 2022 - 2023			
<ul> <li>Samantha Virtual Co-designer Application</li> </ul>	2022			
<ul> <li>CCAT Takeover Performance Driving Simulation</li> </ul>	2021 – 2022			
Full-size AV Model Prototype	2021			
<ul> <li>AirSim Modifications for Virtual Reality and Vehicle Inputs</li> </ul>	2019 – 2020			
Clemson University Course Projects, Clemson, SC				
<ul> <li>pieFloors (Tangible Embodied Interfaces)</li> </ul>	2022			
<ul> <li>Cooperative Ethics Unity Dilemma Scene (Fundamentals of HCC)</li> </ul>	2019			
Laughing Lance Studios, Clemson, SC				
Virtual Corners: Driving Speed-Accuracy Tradeoff	2022			
<ul> <li>Virtual Corners: Cornering Law Assumptions</li> </ul>	2021 – 2022			
FELLOWSHIPS, HONORS & AWARDS				
Upsilon Pi Epsilon ACM Honor Society, Clemson University The Honor Society of Phi Kappa Phi, Clemson University	2021 – Current 2021 – 2023			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University SERVICE & VOLUNTEER WORK	2021 2018 2018 2017 – 2018			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University SERVICE & VOLUNTEER WORK	2021 2018 2018			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service	2021 2018 2018 2017 – 2018			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor	2021 2018 2018 2017 – 2018 2024			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach	2021 2018 2018 2017 – 2018 2024 2023			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor	2021 2018 2018 2017 – 2018 2024			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee	2021 2018 2018 2017 – 2018 2024 2023			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee  Reviewing (Conference)	2021 2018 2018 2017 – 2018 2024 2023			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee  Reviewing (Conference) • ACM CHI Conference on Human Factors in Computing Systems	2021 2018 2018 2017 – 2018 2024 2023 2023 – 2024			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee  Reviewing (Conference) • ACM CHI Conference on Human Factors in Computing Systems • ACM CHI Conference on Human Factors in Computing Systems	2021 2018 2018 2017 – 2018 2024 2023 2023 – 2024			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee  Reviewing (Conference) • ACM CHI Conference on Human Factors in Computing Systems • ACM CHI Conference on Human Factors in Computing Systems	2021 2018 2018 2017 – 2018 2024 2023 2023 – 2024 2023 2022 2022			
Inclusive Design Challenge Winning Team, U.S. Department of Transportation Emerging Leader Award Nomination, Boise State University Student Employee of the Year Award Nomination, Boise State University The Barbara L. Wilson Dean's Innovation Scholarship, Boise State University  SERVICE & VOLUNTEER WORK  University Service  • Student Organization, Dev Club, Faculty Advisor • Member, Boise State University, GIMM, Local H.S. Student Outreach • Member, Boise State University, GIMM, Program Coordinator Search Committee  Reviewing (Conference) • ACM CHI Conference on Human Factors in Computing Systems • ACM CHI Conference on Human Factors in Computing Systems • HFES Human Factors and Ergonomics Society • ACM SIGCHI Conference on Designing Interactive Systems	2021 2018 2018 2017 – 2018 2024 2023 2023 – 2024 2023 2022 2022 2022			
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### **SIGASSETS 2023**

Hybrid Experiences Chair	2023		
<ul> <li>Human Factors and Ergonomics Society</li> <li>Session Chair: VR: User Interaction, Perception, and Accessibility (XR4)</li> <li>Virtual Environments Technical Group Webmaster</li> </ul>	2023 2021 – 2023		
Student Volunteer (Conference)  • CHI Play Virtual Conference	2021		
XR Access  • Accessible Development, Inclusive Design, and Business Cases Workstreams	2021		
Connector Ambassador sharing ideas between the work streams  Upsilon Pi Epsilon, Clemson University  Chapter President Conducts Division	2021		
<ul> <li>Chapter President, Graduate Division</li> <li>Boise State University, Boise, ID</li> <li>Founding President, BSLI Dev Club</li> <li>2018 – 2019</li> </ul>			
<ul> <li>Founding President, BSU Dev Club</li> </ul>	2018 – 2019		

# PROFESSIONAL SOCIETY MEMBERSHIPS

Association for Computing Machinery Human Factors and Ergonomics Society Institute of Electrical and Electronics Engineers International VR Professionals Association VR/AR Association XR Access