

Clint Zeagler

Principal Research Scientist
Institute for People and Technology
Georgia Institute of Technology
Atlanta, GA USA

WWW.CLINTZEAGLER.COM



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EDUCATIONAL BACKGROUND

Degree	Year	University	Field
Ph.D	Fall 2018	Georgia Institute of Technology	Human Centered Computing
M.A.	Spring 2006	Domus Academy, Milan, Italy Validated by the University of Wales	Fashion Design
B.S.	Spring 2004	Georgia Institute of Technology	Industrial Design
Minor	Spring 2004	Georgia Institute of Technology	Textile Manufacturing

EMPLOYMENT HISTORY

Title	Organization	Date
Principal Research Scientist Interim Co-Director of Strategic Partnership & Adjunct Faculty for School of Interactive Computing	Institute for People and Technology Georgia Institute of Technology	07/2023-present
Interim Co-Director of Strategic Partnership & Adjunct Faculty for School of Interactive Computing	Institute for People and Technology Georgia Institute of Technology	07/2022-present
Senior Research Scientist	Institute for People and Technology Wearable Computing Center (WCC) Georgia Institute of Technology	07/2018-07/2023
Research Scientist II Program Manager of WCC	Interactive Media Technology Center Wearable Computing Center (WCC) Georgia Institute of Technology	10/2014 -07/2018
Research Scientist I	School of Industrial Design & GVU Center Georgia Institute of Technology	09/2010 – 10/2014
Lecturer	School of Industrial Design Georgia Institute of Technology	02/2007 – 09/2010
Part Time Professor of Fashion Design	Savannah College of Art and Design – Atlanta Campus	2008-2012
Owner / Creative Director	Pecan Pie Couture – Fashion Company	2006-2013

CURRENT FIELDS OF INTEREST

Human Computer Interaction | Human Centered Computing | Wearable Technology | Wearable Computing | Transdisciplinary Collaboration | On-Body Interaction | Interactive Textiles | Fashion | Industrial Design | Animal Computer Interaction

QUALIFICATION ABSTRACT

Zeagler has shown *clear evidence of consistent performance in the making of original and innovative contributions that are nationally recognized for their excellence* with **35 peer reviewed publications** (including a Best Paper) gaining over **1200 citations**, and over **15 invited speaker presentations** (including keynotes and plenary presentations). Zeagler has taught over **40 courses** at the Georgia Institute of Technology.

Zeagler currently acts as the Interim Co-Director of Strategic Partnership for the Institute for People and Technology and recently as the Program Manager for the Wearable Computing Center. As such he has shown *superior ability in representing the Wearable Computing Center, Institute for People and Technology, and the Georgia Institute of Technology* in service to and dealings with outside organizations. Having helped create the Wearable Computing Center, he used his position to generate research partnerships with diverse companies such as Google, the Atlanta Braves, Thyssen Krupp, and BMW. He also uses the center to promote Georgia Tech and wearable technology to the general public. He designed and curated an exhibition about wearable technology, which has traveled internationally and has been visited by over **50,000 people**. Zeagler authored a free e-book (downloaded by over 500 people) to accompany the exhibition and has organized numerous panels, lectures, and tours for the public on the topics surrounding the exhibition (including a tour for Angela Merkel the chancellor of Germany). He also led a team of faculty and staff to create the WCC Forum 2014 and 2015 at Georgia Tech with a total attendance of over 400 people. The WCC Forums directly lead to industry projects due to Zeagler's ability to set up round table groups and lunches around topics interesting to attendees. Key to Zeagler's understanding of outreach is also taking advantage of opportunity and capitalizing on the industry excitement generated by events and installations.

Zeagler has been teaching courses at the college level for over **15 years** instructing over **2600 students** in over **30 courses** at the **Georgia Institute of Technology**, while also teaching fashion design and textiles at **Savannah College of Art and Design** from 2008 to 2012.

Zeagler has been able to fund his research and create a focus in the projects he works on through his substantial documented contributions in sponsored program development by helping co-author over 30 grants, receiving funding for over **18 grants**. These include a prestigious and competitive National Endowment for the Arts grant for his work in on-body electronic textile interfaces, and two National Science Foundation grants for his work in facilitating interactions for dogs with occupations. These grants among others not only fund Zeagler but also numerous research scientists, PhD. students, master students, and even undergraduate research assistants. Zeagler has helped author grants and sponsored projects bringing in over a total of **2.67 million** while working at Georgia Tech.

I. Nationally and Internationally Recognized Original and Innovative Work

[Google Scholar Citations](#)

A. Ph.D. Thesis

Title: *“Designing Textile-Based Wearable On-Body Electronic Interfaces Utilizing Vibro-Tactile Proprioceptive Display”*

Date Completed: *December 2018*

Advisor: *Dr. Melody Moore Jackson*

University: *Georgia Institute of Technology*

B. Published Journal Papers (refereed)

- B 1. **Clint Zeagler**, Peter Presti, Elizabeth Mynatt, Thad Starner, Melody Moore Jackson. “Proprioceptively displayed interfaces : aiding non-visual on-body input through active and passive touch” *Personal and Ubiquitous Computing*. 2021
- B 2. **Clint Zeagler**, Maribeth Gandy, Paul Baker. “The Assistive Wearable: Inclusive by Design” *Assistive Technology Outcomes and Benefits* Volume 12, 2018.
- B 3. Freil, Larry, Ceara Byrne, Giancarlo Valentin, **Clint Zeagler**, David Roberts, Thad Starner, and Melody Jackson. "Canine-Centered Computing." *Foundations and Trends® in Human-Computer Interaction* 10, no. 2 (2017): 87-164.
- B 4. Gandy, M., P.M.A. Baker, **Clint Zeagler**. “Imagining Futures: A Collaborative Policy Design for Wearable Computing” *Futures Journal* Nov 2016
- B 5. Baker, P. M. A., Maribeth Gandy, and **Clint Zeagler**. "Innovation and Wearable Computing: A Proposed Collaborative Policy Design Framework." *Internet Computing, IEEE* 19.5 (2015): 18-25. Zeagler helped develop the idea of the framework and played an active role in the content development for the article.
- B 6. Jackson, Melody M., Giancarlo Valentin, Larry Freil, Lily Burkeen, **Clint Zeagler**, Scott Gilliland, Barbara Currier, and Thad Starner. "FIDO—Facilitating interactions for dogs with occupations: wearable communication interfaces for working dogs." *Personal and Ubiquitous Computing* 19, no. 1 (2015): 155-173.

C Published Books & Parts of Books

- C 1. **Clint Zeagler**. (2022). Chapter 5: Fashion and Design. In *American Decades: 2010-2019*. Gale
- C 2. **Clint Zeagler**, Thad Starner, Tavvener Hall, and Maria Wong Sala. "Meeting the Challenge: The Path Towards Consumer Wearable Computer" ISBN-13 978-0-9962925-0-4 (7/28/2015)
- C 3. LE. Dunne, H. Profita, **Clint Zeagler**. "Wearable Sensors: Fundamentals, Implementation and Applications / Chapter 1.2 Social Aspects of Wearability and Interaction." ISBN-13: 978-0124186620 ISBN-10: 0124186629, (September 17, 2014)
- C 4. Medina, Joyce, and **Clint Zeagler**. "The 60th Anniversary of Industrial Design at Georgia Tech." ISBN 978-0-9888773-0-6 (2013).

D Conference Papers, Presentations, & Exhibitions

D.1 Conference Presentations with Proceedings (refereed)

- D.1.1. **Clint Zeagler**, Jones, B. D., Gandy, M., & Robertson, S. L. (2022, April 27). Wearable Technology Design and Accessibility Considerations Course. CHI 22 ACM Conference on Human Factors in Computing Systems - Proceedings.
<https://doi.org/10.1145/3491101.3503751>
- D.1.2. **Clint Zeagler**, Jones, B. D., Gandy, M., & Robertson, S. L. (2022, February 13). Wearable Technology Design and Accessibility Considerations Studio. TEI 22 ACM Tangible, Embedded and Embodied Interaction International Conference Proceeding Series.
<https://doi.org/10.1145/3490149.3503665>
- D.1.3. Raja Schaar, **Clint Zeagler** "Predicting Inclusive Futures: Wearables, Automation, and Design Speculation" 12th International Conference on Applied Human Factors and Ergonomics (AHFE 2021), Virtual, July 25-29, 2021
- D.1.4. **Clint Zeagler**, Jaye Lish, Edie Cheezburger, Max Woo, Kathleen L Tynan, Elise Morton, Simrun Mannan, Eva Christensen, Jordan Eggleston, Paige Greenfield, Chloe Lynne Choi, Axel Gustafsson, Jonatan Holmgren, Aparna Iyer, Michale Chi, Maribeth Gandy, Laura Levy, and Jay Bloter. "YOU BETTA WERK: using Wearable Technology Performance Driven Inclusive Transdisciplinary Collaboration to Facilitate Authentic Learning." Fifteenth International Conference on Tangible, Embedded, and Embodied Interaction ACM TEI '20, February 2021.
- D.1.5. Byrne, Ceara, **Clint Zeagler**, Larry Freil, Allison Rapoport, Melody Moore Jackson. "Dogs Using Touchscreens in the Home: A Case Study for Assistance Dogs Operating Emergency Notification Systems" ACM Conference on Animal Computer Interaction, December 2018.
- D.1.6. Logas, Jacob, Will Mitchel, Monira Khan, Lorita Freeman, **Clint Zeagler**, Melody Moore Jackson. "A Toolkit for Animal Touchscreen Slider Design" ACM Conference on Animal Computer Interaction, December 2018.

- D.1.7. **Clint Zeagler**. "Where to Wear It: Functional, Technocal, and Social Considerations in On-Body Location for Wearable Technology, 20 Years of Designing for Wearability" In Proceedings of the International Symposium on Wearable Computers ISWC, Sept 2017
- D.1.8. **Clint Zeagler**, Scott Gilliland, Katherine Fisher, Shimmy Boyle, and Laura Levy. "Le Monstré: an interactive participatory performance costume." In *Proceedings of the 2017 ACM International Symposium on Wearable Computers*, pp. 260-264. ACM, 2017. **BEST Aesthetic Design Exhibition Award**
- D.1.9. **Clint Zeagler**, Maribeth Gandy, Scott Gilliland, Delton Moore, Rocco Centrella, Brandon Montgomery. "In Harmony: Making a Wearable Musical Instrument as a Case Study of using Boundary Objects in an Interdisciplinary Collaborative Design Process" In Proceedings of Designing Interactive Systems Conference ACM Edinburgh, United Kingdom, June 2017
- D.1.10. **Clint Zeagler**, Ceara Byrne, Giancarlo Valentin, Larry Freil, Eric Kidder, James Crouch, Thad Starner, Melody Jackson. "Search and Rescue: Dog and Handler Collaboration Through Wearable and Mobile Interfaces". In Proceedings of Animal Computer Interaction Conference ACM London, United Kingdom, November 2016
- D.1.11. **Clint Zeagler**, Jay Zuerndorfer, Andrea Lau, Larry Freil, Scott Gilliland, Thad Starner, Melody Jackson. "Canine Computer Interaction: Towards Designing a Touchscreen Interface for Working Dogs", In Proceedings of Animal Computer Interaction Conference ACM London, United Kingdom, November 2016
- D.1.12. **Clint Zeagler**, Gilliland, S. and Presti, P. Throwing Buddy: Solving Sensor Challenges Through Soft-Good Construction, Design , and Fabric Selection. Ubicomp/ISWC '15 (Osaka, Japan, 2015), 1319–1325.
- D.1.13. Cochran, Z., **Clint Zeagler**. and Mccall, S. 2015. Addressing Dresses : User Interface Allowing for Interdisciplinary Design and Calibration of LED Embedded Garments. (2015), 61–64.
- D.1.14. **Clint Zeagler**, Scott Gilliland, Larry Freil, Thad Starner, and Melody Jackson. "Going to the dogs: towards an interactive touchscreen interface for working dogs." In Proceedings of the 27th annual ACM symposium on User interface software and technology, pp. 497-507. ACM, 2014.
- D.1.15. Valentin, Giancarlo, Joelle Alcaininho, Larry Freil, **Clint Zeagler**, Melody Jackson, and Thad Starner. "Canine reachability of snout-based wearable inputs." In Proceedings of the 2014 ACM International Symposium on Wearable Computers, pp. 141-142. ACM, 2014.
- D.1.16. Dunne, Lucy E., Halley Profita, **Clint Zeagler**, James Clawson, Scott Gilliland, Ellen Yi-Luen Do, and Jim Budd. "The social comfort of wearable technology and gestural interaction." 36th Annual International Conference of the IEEE In Engineering in Medicine and Biology Society (EMBC), 2014, pp. 4159-4162.

- D.1.17. Byrne, Ceara Ann, Claudia B. Rebola, and **Clint Zeagler**. "Design research methods to understand user needs for an etextile knee sleeve." In Proceedings of the 31st ACM international conference on Design of communication, pp. 17-22. ACM, 2013.
- D.1.18. **Clint Zeagler**, Scott Gilliland, Stephen Audy, and Thad Starner. "Can I Wash It?: The Effect of Washing Conductive Materials Used In Making Textile Based Wearable Electronic Interfaces." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 143-144. ACM, 2013.
- D.1.19. Jackson, Melody Moore, **Clint Zeagler**, Giancarlo Valentin, Alex Martin, Vincent Martin, Adil Delawalla, Wendy Blount et al. "FIDO-facilitating interactions for dogs with occupations: wearable dog-activated interfaces." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 81-88. ACM, 2013. **BEST PAPER**
- D.1.20. Profita, Halley P., James Clawson, Scott Gilliland, **Clint Zeagler**, Thad Starner, Jim Budd, and Ellen Yi-Luen Do. "Don't mind me touching my wrist: a case study of interacting with on-body technology in public." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 89-96. ACM, 2013.
- D.1.21. **Clint Zeagler**, Stephen Audy, Scott Pobiner, Halley Profita, Scott Gilliland, and Thad Starner. "The electronic textile interface workshop: Facilitating interdisciplinary collaboration." In Technology and Society (ISTAS), 2013 IEEE International Symposium on, pp. 76-85. IEEE, 2013.
- D.1.22. **Clint Zeagler**, Scott Gilliland, Halley Profita, and Thad Starner. "Textile interfaces: Embroidered jog-wheel, beaded tilt sensor, twisted pair ribbon, and sound sequins." In Wearable Computers (ISWC), 2012 16th International Symposium on, pp. 60-63. IEEE, 2012.
- D.1.23. Gilliland, Scott, Nicholas Komor, Thad Starner, and **Clint Zeagler**. "The Textile Interface Swatchbook: Creating graphical user interface-like widgets with conductive embroidery." In Wearable Computers (ISWC), 2010 International Symposium on, pp. 1-8. IEEE, 2010. **Nominated for Best Paper**
- D.1.24. Komor, Nicholas, Scott Gilliland, James Clawson, Manish Bhardwaj, Mayank Garg, **Clint Zeagler**, and Thad Starner. "Is It Gropable?—Assessing the Impact of Mobility on Textile Interfaces." In Wearable Computers, 2009. ISWC'09. International Symposium on, pp. 71-74. IEEE, 2009.

D.2 Invited Presentations

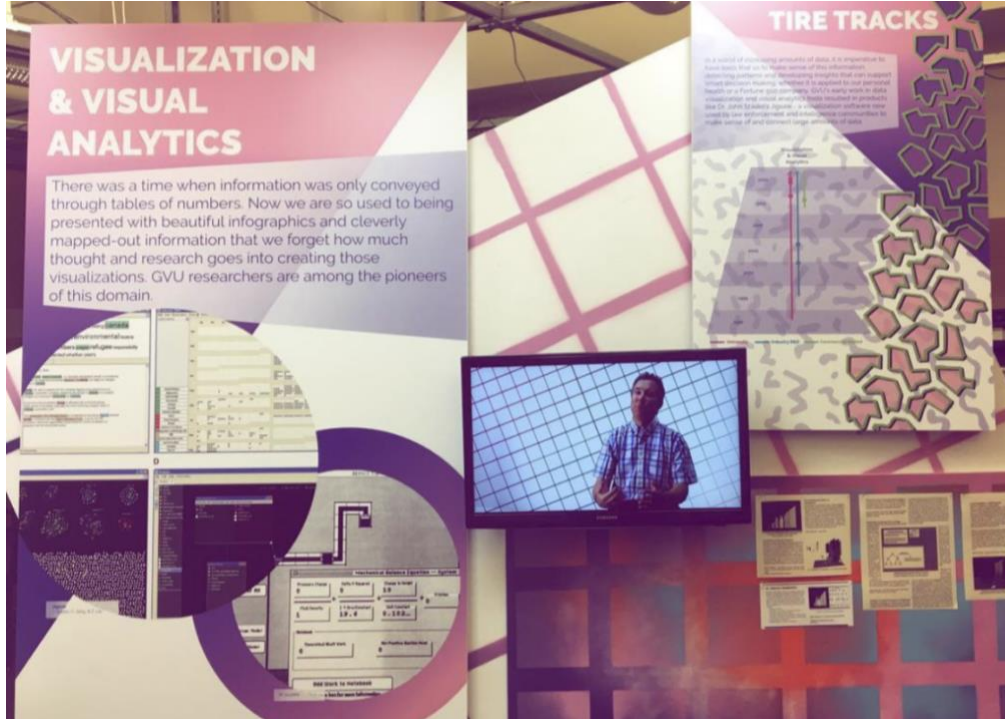
- D.2.1. Ignite Your Senses Panel / Creating Places to Belong Through the Senses – Kimbell International Design Event (August 8th, 2022)
- D.2.2. Wearable Technology Accessibility and Design Considerations Tutorial – ACM UbiComp / International Symposium on Wearable Computers (Sept, 25th, 2021)
- D.2.3. Gensler Atlanta Maker Week – “Co-Creation: Facilitating Transdisciplinary Collaborative Design on Wearable Technology” – Keynote Talk (Nov, 11th 2019)

- D.2.4. IPAT Thursday Think Tank on Transdisciplinary Collaborations in Wearable Technology – Speaker (Feb 7th 2019)
- D.2.5. Talking Craft - Fabrics: How do craft and "making" affect the construction of who we are? Panelist (Feb 14th 2018)
- D.2.6. Gvu Brown Bag, Foley Scholar Presentation, (Oct, 5th 2017)
- D.2.7. Gvu Brown Bag, #CreativeCollisions , (Sept, 28th 2017)
- D.2.8. Georgia Tech Center for Music Technology Seminar, (Sept, 18th 2017)
- D.2.9. Dragon Con Panel, Dystopian Future Technology and Gaming Panel (Sept, 2nd 2017)
- D.2.10. Gvu Brown Bag Presentation, Nostalgic Futures: 25 years of Creating Tomorrows (Aug, 24th 2017)
- D.2.11. IPAT Thursday Think Tank on Creative Collisions Interdisciplinary Collaboration. (Jan 19th 2017) Speaker, Discussion Leader
- D.2.12. #CanYouFashionIt Goethe Institute Atlanta “Wearables and Wellness” (Jan 19th 2017) Panelist speaking on Wearable Technology and Interactive Textiles.
- D.2.13. #CanYouFashionIt Goethe Institute Atlanta “Creativity Vs. Commerce” (Jan 12th 2017) Panelist speaking on Wearable Technology and Interactive Textiles.
- D.2.14. #CreativeCollisions Talk on Interdisciplinary Collaboration. Ferst Center for the Arts. (Jan 10th 2017) Speaker
- D.2.15. Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Fashion Panel *Moderator* (September 29, 2016)
- D.2.16. Design Collective + MODA Museum Of Design Atlanta Panel “Live, Work, Play” (August 17th, 2016) Panelist speaking on Wearable Technology and Interactive Textiles.
- D.2.17. Google Tech Talk – Electronic Textile Interfaces – (July 11, 2016) Company-wide talk at Google’s Mountain View Campus, with focus groups questions from Project Jacquard.
- D.2.18. 21st WT | Wearable Technologies Conference 2016 USA (July 12-13, 2016) Keynote Speaker. Zeagler spoke on the History of Wearable Computers.
- D.2.19. Technology Collaboration Center of Houston Event Series, Wearable Technology. (April 26, 2016) Invited Speaker. Zeagler spoke on E-Textile On-Body Interfaces
- D.2.20. IPaT Thursday Think Tank, Designing Touch Screen Interfaces for Dogs, Invited Talk, (January 21, 2016)

- D.2.21. Computer History Museum, Opening Panel Discussion and presentation for *On You: A Story of Wearable Computing* (June 30, 2015) Invited panelist and speaker.
- D.2.22. Georgia Tech Symposium on Design and Wearable Technology (May 8-9 2015) Invited Speaker. Zeagler spoke on E-Textile On-Body Interfaces
- D.2.23. CSE Innovation Summit, Wearable Technology Boot Camp, (January 23, 2015) Invited Speaker. Zeagler spoke on the current state and future of wearable technology.
- D.2.24. Grace Hopper Celebration, The Future of Wearable Technologies in Women's Fashion (Oct 10, 2014) Invited Panelist.
- D.2.25. Wireless Technology Forum, Future of Wearable Technology, (Feb 20, 2014) Invited Speaker. Zeagler was the panel moderator.
- D.2.26. IPaT People and Technology Forum 2013, Wearables in a Post Modern World. Invited Panelist. November 2013
- D.2.27. IEEE International Symposium on Technology and Society (June 27-29 2013) Invited Speaker. Zeagler spoke on E-Textile On-Body Interfaces
- D.2.28. Nanyang Technological University Wearable Technology Symposium (March 28, 2013) Invited Speaker. Zeagler spoke on E-Textile On-Body Interfaces
- D.2.29. GVV Brown Bag Seminar, Electronic Textile Interfaces, Invited Presentation, (February 21, 2013)
- D.2.30. Smart Fabrics Conference (April 17-19, 2012) Invited Speaker. Zeagler spoke on E-Textile On-Body Interfaces

D.3 Videos, Demonstrations, & Exhibition

- D.3.1. **Clint Zeagler**, Laura Levy, Maribeth Coleman, Jay Bolter, Beth Mynatt. “Nostalgic Futures” Georgia Institute for Technology Library. November 2018 / Exhibition documenting the 25 year history of research at the Georgia Tech Gvu Center. Zeagler designed and curated the exhibition and video content. <https://nostalgicfutures.gvu.gatech.edu>

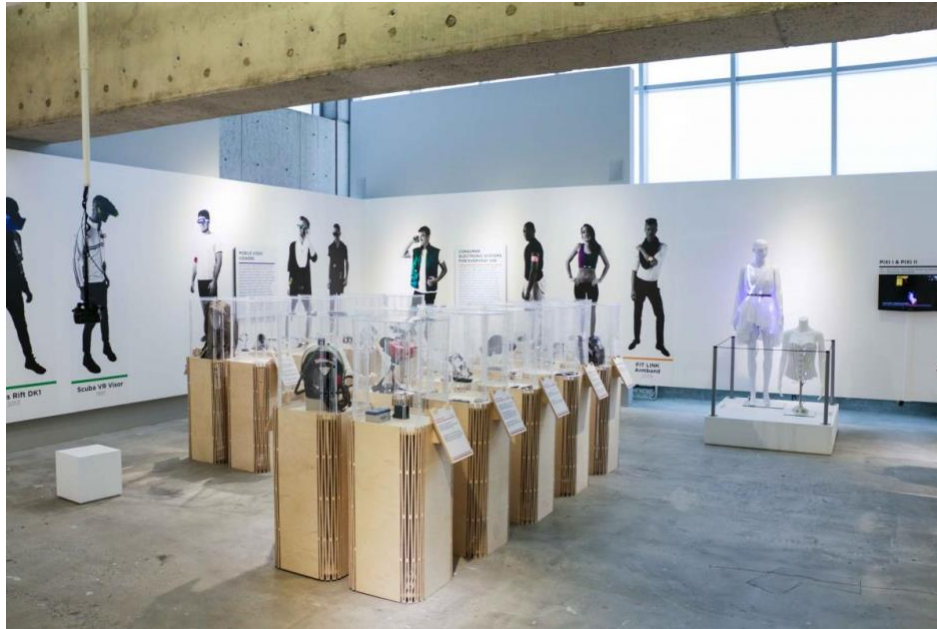


- D.3.2. **Clint Zeagler**, Laura Levy, Maribeth Coleman, Jay Bolter, Beth Mynatt. “Nostalgic Futures” Institute for People and Technology. January 2018

- D.3.3. **Clint Zeagler**, Laura Levy, Maribeth Coleman, Jay Bolter, Beth Mynatt. “Nostalgic Futures” Gvu Showcase Exhibition for Gvu 25th Anniversary. October 2017

- D.3.4. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. “On You: Wearing Technology,” Museum of Design Atlanta. July 2016 – January 2017. >8500 visitors.





D.3.5. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. “On You: A Story of Wearable Computing.” Computer History Museum. Mountain View, CA. July-September, 2015. Over 30,000 visitors. Provided several tours for the public, Google, Intel, and Georgia Tech.



D.3.6. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. “Meeting the Challenge: the path towards a consumer wearable computer.” Stubbins Gallery, Industrial Design, Georgia Tech. December-January, 2015.

- D.3.7. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. "Meeting the Challenge: the path towards a consumer wearable computer." Institute for People and Technology, Georgia Tech. October-December, 2014.
- D.3.8. **Clint Zeagler**, T. Starner, and T. Hall. "Discover! Wearable Computing Technology." Exhibit and lectures on a subset of the devices shown at the larger exhibit. World Economic Forum - Annual Meeting of New Champions, Tianjin, China. September, 2014.
- D.3.9. **Clint Zeagler**, T. Starner, and T. Hall. "Wearable Computing 1989-2014." Google Cultural Institute on-line exhibition. August 2014. <https://www.google.com/culturalinstitute/exhibit/wearable-computing/gQuZsQUI?hl=en-GB>
- D.3.10. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. "Meeting the Challenge: the path towards a consumer wearable computer." Deustches Museum (the "largest museum of science and technology in the world"), Munich, Germany. August-September, 2014.
- D.3.11. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. "Meeting the Challenge: the path towards a consumer wearable computer." Christian Democratic Party headquarters exhibition, Berlin, Germany. July-August, 2014.
- D.3.12. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. "Meeting the Challenge: the path towards a consumer wearable computer." 800 visitors. The Factory (start-up incubator) opening, Berlin, Germany. June, 2014.
- D.3.13. **Clint Zeagler**, T. Starner, and T. Hall. "Meeting the Challenge: the path towards a consumer wearable computer." On-line exhibit. April 2014. <http://wcc.gatech.edu/exhibition>
- D.3.14. **Clint Zeagler**, T. Starner, T. Hall, K. Swankwiler, and Y. Kaplan. "Meeting the Challenge: the path towards a consumer wearable computer." Exhibit of 74 devices (47 displays) demonstrating the challenges over several decades of creating a consumer wearable computer. 1000 visitors. CHI, Toronto, Canada. April, 2014.

- D.3.15. **Clint Zeagler** and T. Starner. Electronic Textile Interface Swatchbook exhibited at “Shifting Paradigms of Identity: Creative Technology and Fashion.” Curated by M. Benitez and N. Palomo-Lovinski. Kent State University Museum. September 2013 - August 2014
- D.3.16. **Clint Zeagler**, T. Starner, S. Gilliland, and N. Komor. “Control electronics with clothing.” Live television demo on CNN “The Big I” segment of the Textile Swatchbook, October 19, 2010.
- D.3.17. **Clint Zeagler** and T. Starner. “On You 2.” Museum of Design Atlanta exhibit on textile interfaces. Atlanta, GA, June 11-August 14, 2010.
- D.3.18. **Clint Zeagler** and Kevin Knaus. “In The Bag” Museum of Design Exhibition exhibit on handbag design. Zeagler curated and built the exhibition.
- D.3.19. **Clint Zeagler** and T. Starner. “On You.” Museum of Design Atlanta exhibit on output of Mobile and Ubiquitous Computing class collaboration between Industrial Design and College of Computing. Atlanta, GA, March 2008.

D.4 Publication Awards and Recognition

- D.4.1. ISWC International Symposium on Wearable Computers **10 Year Impact Award 2023** for paper: Jackson, Melody Moore, **Clint Zeagler**, Giancarlo Valentin, Alex Martin, Vincent Martin, Adil Delawalla, Wendy Blount et al. "FIDO-facilitating interactions for dogs with occupations: wearable dog-activated interfaces." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 81-88. ACM, 2013.
- D.4.2. ISWC **Best Paper 2013** for: Jackson, Melody Moore, **Clint Zeagler**, Giancarlo Valentin, Alex Martin, Vincent Martin, Adil Delawalla, Wendy Blount et al. "FIDO-facilitating interactions for dogs with occupations: wearable dog-activated interfaces." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 81-88. ACM, 2013.

E. Patents Issued

1. Sensor for measuring tilt angle based on electronic textile and method thereof. Hyung Sun Lee, Hyung Cheol Shin, Thad E Starner, Scott M Gilliland, **Clint Zeagler**. Awarded April 19, 2016 (US9316481)

Invention Disclosures

Internal Case Number	Title	Date Submitted
6092	Hanging Bead Tilt Sensor	6/6/12
4976	Textile Interface: Pleats	9/2/09
4975	Textile Interfaces: Slider	9/2/09
4974	Textile Interface Swatchbook	9/2/09
4972	Textile Interfaces: Menu	9/1/09
4971	Textile Interfaces: Rocker Switch	9/1/09

F. Research Reports

1. Simon, Cory, Lucy Dunne, Clint Zeagler, Tom Martin, and Rebecca Pailles-Friedman. "NASA Wearable Technology CLUSTER 2014-2015 Report." (2015). For this report we collected all the student projects along with conference photos and NASA mentor comments. The report was given to the Space Grant Consortiums sponsoring the work.
2. Simon, Cory, Lucy Dunne, Clint Zeagler, Tom Martin, and Rebecca Pailles-Friedman. "NASA Wearable Technology CLUSTER 2013-2014 Report." (2014). For this report we collected all the student projects along with conference photos and NASA mentor comments. The report was given to the Space Grant Consortiums sponsoring the work.

G. Artistic Endeavors

1. 'Textile Incantations' at Grant and Little (upcoming solo show in early 2024)



2. 3rd Annual Atlanta Mayor's Pride Exhibit: A Showcase of LGBTQ+ Artistry and Unity 2023 (two pieces included)
3. 'New Year, New Talent' Vaknin Gallery (Jan 2008 group show)

H. Key Delivered Products

1. Wearable Technology Designer's Web Tool

Summer 2021

← Wearable Technology Designer's Web Tool

Project: CLINT'S GREAT WEARABLE TECH

Proxemics Personal Space

When objects protrude outside of our personal space they can get in the way of our daily movements. If your wearable device is to be worn regularly in daily life this could be important.

How big do you expect your wearable device to be? Remember size can determine how many sensors might be included and battery life.

Very Large (greater than 1 ft or 3 m)

Large (greater than 6 in or 15 m)

Medium (greater than 3 in or 7 cm)

Small (greater than 1 in or 2.5 cm)

Very Small (less than 1 in or 2.5 cm)

Tiny (less than .5 in or 1 cm)

Very Tiny (less than .25 in or .5 cm)

How far from the body do you expect the device to protrude or stick out from the skin?

Less than .1 in or .25 cm

Greater than .1 in or .25 cm

Greater than .25 in or .5 cm

Greater than .5 in or 1.5 cm

Greater than 1 in or 2.5 cm

Greater than 2 in or 5 cm and Less than 4 in or 10 cm

Do you expect some user-wearers to have issues with mobility, might they be in wheelchairs or use other devices on a daily basis to aid in mobility?

Yes

Maybe

No

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Previous Next

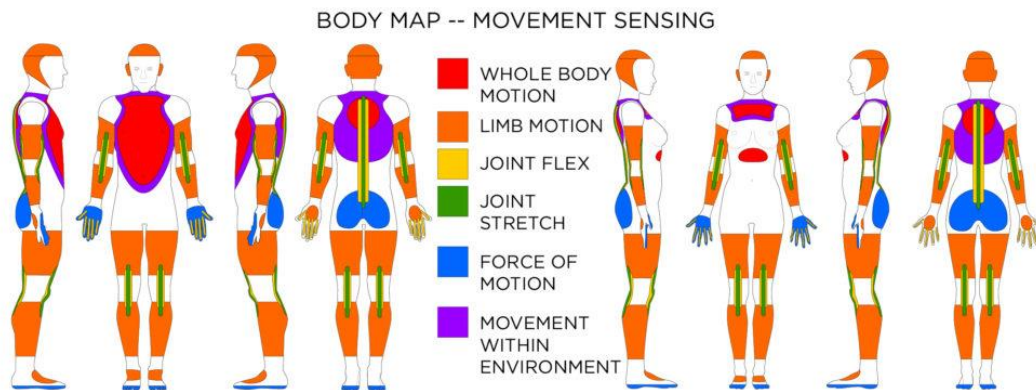
Product: The Wearable Technology Designer's Web Tool is a tool that leads designers / developers through a series of questions about their wearable technology project. The questions are designed to force designers to think of all options at the beginning of a project, illuminating opportunities and shortcomings in accessibility caused by decisions along the way. As the designer makes selections pertaining to the purpose and interaction styles of their project a body map builds in real time showing where on the body the technology might best be placed. When all the questions are answered the tool creates a .pdf with the body map and all pertinent design and accessibility considerations for the project (including an extensive list of academic references for deeper research). The Wearable Technology Designers Web Tool will be free to use. In the past year over **350** individuals have signed up to use the free online tool.

<https://wearabletechwebtool.ipat.gatech.edu/>

Contribution: Zeagler designed the tool and experience as a technology translational outcome for the Wireless RERC as D2 Task Leader funded by NIDILRR. He supervised a team of researchers and students to construct. The tool has been the center of three educational workshops and courses at ACM conferences, and is also used every semester in the Mobile and Ubiquitous Computing Course taught in the School of Interactive Computing.

2. Wearable Technology Body Maps

December 2018

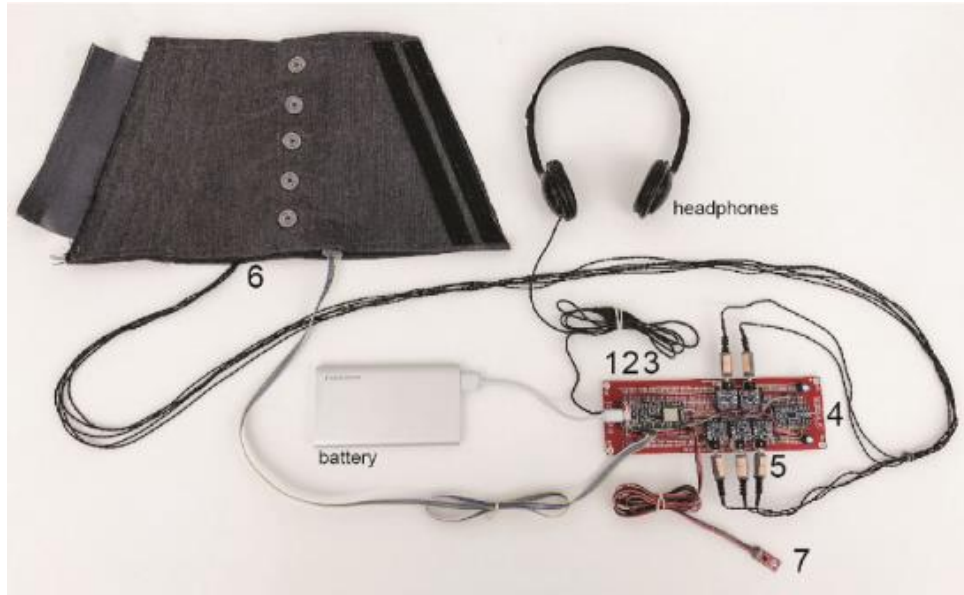


Product: Prior to the development of the Wearable Technology Designer's Web Tool all the information and research was designed and displayed as a set of body maps with associated design and accessibility considerations. These body maps also included references for further research. The maps have been used by industry partners, academics, and even in STEM education and outreach.

<http://www.clintzeagler.com/where-it-body-maps/>

Contribution: Zeagler conducted the literature review and synthesized the research into the set of 20 body-maps and associated design and accessibility considerations.

3. Proprioceptive Display On-Body Interactive Textile Sleeve Fall 2017



Product: The Interactive Textile Sleeve was created as part of a study to test the ability of non-visual interaction with the addition of locating vibrations. On-body input interfaces that can be used accurately without visual attention could have a wide range of applications where vision is needed for a primary task: emergency responders, pilots, astronauts, and people with vision impairments could benefit by making interfaces accessible. This research was a between-participant study (104 participants) to determine how well users can locate e-textile interface discrete target touch points on the forearm without visual attention. We examined whether the addition of active touch embroidery and passive touch nubs (metal snaps with vibro-tactile stimulation) helps in locating input touch points accurately. We found that touch points towards the middle of the interface on the forearm were more difficult to touch accurately than at the ends. We also found that the addition of vibro-tactile stimulation aids in the accuracy of touch interactions by over 9% on average, and by almost 17% in the middle of the interface. Research published here: [Proprioceptively displayed interfaces: aiding non-visual on-body input through active and passive touch](#)

Contribution: Zeagler designed the study and the interactive sleeve. He manufactures all the textile elements and oversaw the hardware and software development.

4. Wearable Computing Exhibition

CHI 2014 / Google / Local Sponsors

Spring 2014 – 2017

Product: The exhibition Clint Zeagler curated along with Thad Starner has had different names at each location and has evolved changed slightly under Zeagler's supervision over the years. The premise is that there have been certain technological and societal challenges to wearable computing that we are just now overcoming. Power, heat, networking, mobile interaction are just a few of these challenges. The exhibition has traveled internationally From Atlanta to China, Germany, Canada, and to California. Currently over 50,000 people have seen the exhibition, including groups of students given tours. The exhibition is accompanied by a free E-Book, which Zeagler spearheaded and an online exhibition.

Contribution: Zeagler acts as PI and manager of the endeavors surrounding the exhibition. As Co-Curator Zeagler shaped the over-arching vision of the exhibition and how the objects chosen could tell a story. Zeagler leveraged his vast knowledge of the field and connections with industry and academics to collect exhibit objects. He collaborated with museum experts on how to write the information at the appropriate level for the public. He even organized a German translation of the exhibition for its arrival at Angela Merkel's office in Berlin. He worked with professors and students at the School of Industrial Design to create the flat pack pedestals (the creation of the display system became a master thesis). Zeagler also chose the items for the exhibition to tell a specific story. Working with wearable technology experts internationally he continues to acquire new items and video for multimedia content. He coordinates the shipment of the exhibition domestically and internationally. He manages the set up and take-down of the exhibition. He gives curator tours at each location. Zeagler also worked with GTRI STEM experts to create a teachers guide for the exhibition so high school educators would understand how to fit the exhibition into their standards and goals for each grade level. He also negotiated funding to pay not only for the exhibition's creation and shipment, but also for his time to manage its progress. Zeagler created an experience that inspires the youth, gives educators opportunities to show and tell, and also opens up conversations about future technology with world leaders and hopeful Georgia Tech Industry Partners.

5. Electronic Textile Interface Swatch Book / ESwatchBook

ETRI & National Science Foundation

2009 - 2013

Product: The ESwatchBook was designed to showcase E-Textile Interface Techniques using conductive materials woven, knitted, and embroidered within fabric swatches. Touch can be registered using a hybrid capacitive resistance technique developed by the research team. The ESwatchBook acts as a tool kit of sorts, not only for engineers and computer scientists, but is designed to also be useful for designers. The form factor and style of interaction is placed within the design process language of those who use textiles to design. Ten ESwatchBooks were made and delivered to design school resource libraries. There were also ESwatchBook workshops conducted to research how the ESwatchBooks might be used to aid in interdisciplinary collaboration. The ESwatchBook and the workshops led to numerous publications.

Contribution: Zeagler's interest in wearable technology sparked this initial research relationship with Thad Starner. Zeagler also co-authored many all of the grants which helped pay for the project, completely funding himself off this work (out side of teaching pay). He was not a hired as Research Scientist by College of Architecture at the time of this work, and therefore was unable to be listed as a CoPI even though he acted as one. Zeagler led the team of industrial design and computer science students in the initial project that led to the ESwatchBook. He worked to acquire the correct equipment to construct the ESwatchBook. Zeagler also organized and managed each of the ESwatchBook workshops (five in total, NYC, Miami, and Atlanta). He authored a majority of the papers following the work. He helped mentor a master student who made the ESwatchBook his thesis project.

I. Special Activities

- GVU Center Research Showcase April 2019
- GVU Center Research Showcase October 2018
- GVU Center Research Showcase April 2018
- GVU Center Research Showcase October 2017
- ACC Smithsonian Creativity & Innovation Festival in Washington DC – Demo of #CreativeCollision Le Monstre Wearable Technology Dance Performance Garment (October 2017)
- GVU Center Research Showcase April 2017
- CHARACTERS / LeMonstre Wearable Technology Performance (March 5th 2017)
- GVU Center Research Showcase October 2016
- Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Fashion Panel *Moderator* (September 29, 2016)
- Wearable Exhibition Curator Tour – MODA September 29, 2016
- Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Arts and Media Panel (September 22, 2016)
- Wearable Exhibition Curator Tour – MODA September 22, 2016
- Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Industry Panel (August 27, 2016)

- Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Athletics Panel (August 6, 2016)
- Wearable Exhibition Curator Tour – MODA August 6, 2016
- Wearable Computing Center and MODA Museum Of Design Atlanta “Wearing the Future” Health Panel (July 28, 2016)
- Wearable Exhibition Curator Tour – MODA July 28, 2016
- Wearable Exhibition Curator Tour – MODA July 16, 2016
- GVU Center Research Showcases – 2015
- Wearable Exhibition Curator Tour – Georgia Tech 2015
- Wearable Exhibition Curator Tour – World Economic Forum, Tianjin China, 2014
- Wearable Exhibition Curator Tour – Deutsches Museum, Munich 2014
- Wearable Exhibition Curator Tour- CDU Headquarters – Angela Merkel Tour -Berlin 2014
- Wearable Exhibition Curator Tour – Startup Factory – Berlin 2015
- GVU Research Showcases – 2014
- Wearable Exhibition Curator Tour – CHI 2014
- GVU Showcases – 2013
- DARPA Private Demo - July 2013
- ESwatchBook Design Workshop – Sponsored by NEA – GVU 20 October 2012
- GVU Research Showcases – 2012
- ESwatchBook Design Workshop – Sponsored by NEA – Smart Fabrics Conference Miami April 2012
- ESwatchBook Design Workshop – Sponsored by NEA – Georgia Tech IPDL/GVU Feb 2012
- ESwatchBook Design Workshop – Sponsored by NEA – SCAD Atlanta Feb 2012
- ESwatchBook Design Workshop – Sponsored by NEA – Parsons NYC October 2011
- GVU Center Research Showcases – 2011
- GVU Center Research Showcases – 2010
- Orange Duffle Bag Charity Event / Demonstration (by invitation of Val Peterson) – Dec 5th 2010
- “Control electronics with clothing.” Live television demo on CNN “The Big I” segment of the Textile Swatchbook (C. Zeagler, T. Starner, S. Gilliland, and N. Komor.), October 19, 2010.
- On You 2 Media Walk Through – June 11th 2010
- Turner Employee Showcase – May 4th 2010
- CHI Media Showcase – April 10th 2010
- ISWC Demos – Sept 5th 2009
- Turner Employee Showcase – April 2009

J. Research Recognition Awards

1. **GVU Impact Award 2022** - In 2007, GVV launched the Impact Awards to recognize individuals who have been instrumental in building a deeper understanding of human perspectives on technology, in envisioning and creating the technological landscape of the future, or in shaping and supporting our community. The Impact Awards were presented again in 2012 and in 2017. This year, to commemorate the 30th anniversary of the founding of the GVV Center, we are again honoring and celebrating the contributions of a handful of passionate, skillful, and committed individuals. Each of the individuals embodies the interdisciplinary mindset and real-world impact that is a hallmark of GVV.
2. **Foley Scholar Research Award Winner- 2016**
Fellowships, awarded annually to two graduate students on the basis of personal vision, brilliance, and potential impact. Foley Scholars are selected by an advisory board comprised of GVV alumni, current faculty, and industry partners during the fall semester.
3. Institute of People and Technology IPaT Shining Star 2015

K. Invited Conference Session Chairmanship

1. Design Exhibition Chair, IEEE International Symposium Wearable Computers 2023
2. Design Exhibition Chair, IEEE International Symposium Wearable Computers 2022
3. Design Exhibition Chair, IEEE International Symposium Wearable Computers 2012
4. Design Exhibition Chair, IEEE International Symposium Wearable Computers 2011

L. Professional Commitments

1. Design Committee Chair, ISWC, ACM International Symposium Wearable Computers 2023
2. Program Committee ISWC International Symposium Wearable Computers 2023
3. Design Committee Chair, ISWC, ACM International Symposium Wearable Computers 2022
4. Program Committee ISWC International Symposium Wearable Computers 2022
5. Design Committee Chair, ISWC, ACM International Symposium Wearable Computers 2021
6. Program Committee ISWC International Symposium Wearable Computers 2021
7. Design Committee Chair, ISWC, ACM International Symposium Wearable Computers 2020
8. Program Committee ISWC International Symposium Wearable Computers 2020
9. Design Committee Chair, ISWC, ACM International Symposium Wearable Computers 2019
10. Program Committee ACM Animal Computer Interaction Conference 2019

11. Steering Committee ACM Animal Computer Interaction Conference 2019 (Publicity Chair)
12. Program Committee ISWC International Symposium Wearable Computers 2019
13. Local Arrangements Chair – ACM Animal Computer Interaction Conference 2018
14. Program Committee - ACM Animal Computer Interaction Conference 2018
15. Design Committee Vice Chair ISWC International Symposium Wearable Computers 2017
16. Technical/Program Committee ISWC International Symposium Wearable Computers 2017
17. Social Media Chair ISWC International Symposium Wearable Computers 2014
18. Design Competition Chair, IEEE International Symposium Wearable Computers 2011 & 2012

M. Georgia Tech Campus Committees

1. **IRI Research Faculty Advisory Council** – Selected by IPaT leadership and research faculty to represent the Institute for People and Technology on the Council. 2023
2. **Faculty Services Committee** – 2022
3. **IRI Research Faculty Advisory Council** – Selected by IPaT leadership and research faculty to represent the Institute for People and Technology on the Council. 2022
4. **Video Collaboration Tools Task Force** – Member of the task for discussing and testing Georgia Tech’s move from Bluejeans to Zoom. 2021

N. STEM / STEAM Outreach

Working with STEM@GTRI I have completed two online courses that high school teachers across the state of Georgia can take at any time. I have personally mentored two sessions of the courses with teachers. I have also helped create an Explorers Guild series of four talks and discussion for STEM@GTRI on the subject of prototyping (drawing, paper, 3d printing, and virtual prototyping). In total reaching over 100 Georgia Teachers, in turn sharing GT research with thousands of high school students. I also directly mentored a Tucker high school STEM class on their submission to the Samsung Solve for Tomorrow 2020-2021 competition in which they placed in the top ten nationally (and won one of two Community Choice prizes).

II. PROJECT LEADERSHIP AND SUPERVISION

A. Performance of Funded Research

Examples of Externally Sponsored Programs as Supervisor (PD, PI, Task Leader)

1. Title:	Enhancing Social Engagement through Online Gameplay for Older Adults with and without Mild Cognitive Impairment
Sponsor:	NIH National Institute of Health SBIR
GT PI:	Maribeth Gandy Coleman
Role:	Senior Investigator / Co-Author of Grant
Budgetary Authority?	Yes
Amount Funded for Project:	Total - \$2,547,524 / GT Share \$776,821 Grant award number is: 1R44AG078009-01
Number and Rank of Persons Supervised:	1 Senior Research Scientist, 1 Research Technician, 2 Undergraduate Research Assistant
Period of Performance	July 2022 – June 2025
Contribution	Task leader for Task 1.2 – Interview older adults with and without MCI about social interaction and connection over games. and Task 1.3 – Observe older adults with and without MCI play social games in-person and over OneClick
2. Title:	Notification and Display for Sensor Enabled PPE
Sponsor:	Ansell
P.I.:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount to be Funded for Project:	\$149,250.00
Number and Rank of Persons Supervised:	2 Senior Research Scientist, 1 Junior Software Engineer, 1 research technician, 1 undergraduate research assistant
Period of Performance	Jan 2023 – Dec 2023
Contributions:	Zeagler acted as the point of contact for Ansell, working with the company representatives he sets expectations and hands over deliverables. Zeagler authored SOW and contract and wrote IRB. He will organize and run interviews and design workshops. Overseeing the focus group work.

3. Title:	AI Institute for Collaborative Assistance and Responsive Interaction for Networked
Sponsor:	NSF
P.I.:	Sonia Chernova
Role:	Co-Project Director
Amount to be Funded for Project:	\$19,996,808
Number and Rank of Persons Supervised:	1 research technician, 1 undergraduate research assistant
Period of Performance	Oct, 2021 – Sept, 2026
Contributions:	Working with Maribeth Gandy Coleman I am the co-lead for the Use Inspired Research project on the use of AI in the kitchen facilitating cooking with mild cognitive impairment.

4. Title:	Contextually Aided Notifications / Roane State
Sponsor:	Roane State Community College
P.I.:	Keith Edwards & Clint Zeagler
Role:	Co-PI
Amount Funded for Project:	~60k
Number and Rank of Persons Supervised:	1 Senior Research Scientist, 1 Research Scientist II, 1 Junior Software Engineer, 1 research technician, 3 undergraduate research assistants
Period of Performance	Jan 2020 – Dec 2022
Contributions:	Zeagler acted as point of contact with Roane State Community College. He created and managed the IRB. Setting up interviews and focus groups with academic success coaches at Roane State. He also oversaw the creation of a Data Use Agreement with Roane State for the transfer and security of FERPA student data for machine learning analysis. He leads meetings with the data analysts and steers the research effort.

5. Title:	COGNITIVE AID DESIGN USING AUGMENTED REALITY TO SUPPORT ATTENTION
Sponsor:	NASA NSPires
P.I.:	Maribeth Gandy Coleman
Role:	Senior Investigator / Task Leader
Amount Funded for Project:	\$59,744 (subaward)
Number and Rank of Persons Supervised:	1 Research Technician, 3 Undergraduate Research Assistants
Period of Performance	2020 - 2022
Contributions:	Helped develop research protocol, wrote and maintained IRB.

6. Title:	Cognitive AR Toolkit: Manipulating Augmented Reality to Enhance Healthcare Work Environments
Sponsor:	Cisco Systems
P.I.:	Maribeth Gandy Coleman
Role:	Senior Investigator / Task Leader
Amount Funded for Project:	\$172,022
Number and Rank of Persons Supervised:	1 Research Technician, 3 Undergraduate Research Assistants
Period of Performance	Jan 2021 – Dec 2022
Contributions:	Helped develop research protocol, wrote and maintained IRB. Managed effort to find healthcare participants.
7. Title:	A Contextually Aware Notification Engine
Sponsor:	Georgia Research Alliance
P.I.:	Maribeth Gandy Coleman
Role:	Senior Investigator
Budgetary Authority?	
Amount Funded for Project:	\$27,831
Number and Rank of Persons Supervised:	1 research technician, 3 undergraduate research assistants
Period of Performance	Nov 28, 2018 – Aug 31, 2019
Contributions:	Helped develop research protocol, wrote and maintained IRB.
8. Title:	Rehabilitation Engineering Research Center on Wireless Inclusive Technologies (Wireless RERC)
Sponsor:	National Institute for Disability, Independent Living, and Rehabilitation Research (NIDILRR) U.S. Department of Health and Human Services. Contract Number: 90RE5025-01-00
P.I.:	Helena Mitchell, (PI), Paul M.A. Baker (Co-PI)
Role:	Task Leader
Budgetary Authority?	
Amount Funded for Project:	\$4,625,000
Number and Rank of Persons Supervised:	1 Senior Research Scientist, 1 Junior Software Engineer, 3 Undergraduate Research Assistants
Period of Performance	Oct. 1, 2016 - Sept. 30, 2021
Contributions:	Zeagler acted as Task Leader for the last year of the Device / Dissemination Task 2. He led a team to create a translational device called the Wearable Technology Designer's Web Tool that gives designers access to inclusive and accessible design methods. https://wearabletechwebtool.ipat.gatech.edu/ Zeagler also acted as a senior investigator in the Research Task 1, researching on-body interactions through multimodal inputs.
9. Title:	Next Generation User Interface

Sponsor:	Thyssen Krupp
P.I.:	Maribeth Gandy Coleman & Clint Zeagler
Role:	CoPI
Budgetary Authority?	Yes
Amount Funded for Project:	\$148,455.00
Number and Rank of Persons Supervised:	2 Research Scientist II, 1 Research Associate I, 1 Research Technician II
Period of Performance	Dec 2015 – Dec 2017
Contributions:	Zeagler acted as the point of contact for Thyssen Krupp Next Gen User Interface, working with the company representatives he sets expectations and hands over deliverables. Zeagler Co-authored SOW and contract, helped develop the IRB. Organized and ran design workshops. Oversaw the focus group work. Wrote findings synthesis and coordinated deliverables with sponsor.

10. Title:	JSC Wearable Tech Symposium, Student Research Projects
Sponsor:	NASA Georgia Space Grant Consortium
P.I.:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount Funded for Project:	\$38,000 (2013 -13K, 2014 -13K, 2015- 9K, 2016- 3K)
Number and Rank of Persons Supervised:	62 students, over 4 years
Period of Performance	Spring Semester 2013, 2014, 2015, 2016
Contributions:	Zeagler wrote grant applications to Georgia Space Grant Consortium. Coordinated with contacts at NASA Johnson Space Center to find mentors for student project teams. Coordinated travel for students to NASA JSC in Houston TX to present their project work to NASA engineers.



11. Title:	Wearable Technology Jewelry Research
Contract Number:	GIFT

Sponsor:	SunJewels
P.I.:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount Funded for Project:	\$25,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 Research Technician II
Period of Performance	Nov 2015 – Nov 2016
Contributions:	Negotiated gift with Indian Company SunJewels to start a research relationship. Zeagler oversaw a small research project with the funds looking into using semi-precious stones and technology to create color-changing jewelry.

12. Title:	The Hood
P.I.:	Clint Zeagler
Candidate's Role:	PI, Design Lead
Amount Funded for Project:	~\$3,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 Masters Students, External Collaborators
Period of Performance	1 week in October 2015
Contributions:	Over the course of one week's time Italian musical artist Rhó worked with Wearable Computing Center Program Manager Clint Zeagler and WCC engineer Scott Gilliland to create what became the Hood, a wearable electronic instrument. Delton Moore a local architect and designer familiar with Rhó was crucial to setting up the collaboration and donated his time to provide design help and feedback. Much of the work involved bridging the disciplinary and cultural boundaries of design to create a device/garment that functioned in the way all parties intended and expected.



13. Title:	Traveling History of Wearable Computing Exhibit
Contract Number:	GIFT
Sponsor:	Google

P.I.:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount Funded for Project:	\$24,483.81
Period of Performance	Dec 2014 – 2018

Zeagler Co-Curated the traveling exhibition. He oversaw the process of receiving gift from Google. Zeagler coordinated the design and the shipment of the exhibition. He also managed local crews at each location setting up the exhibition. Zeagler also gave tours tom the public. Over 50,000 people have seen the exhibition.

Contributions:



14. Title:	CHS: SMALL: DOG TOUCH-TOUCHSCREEN INTERFACES FOR WORKING DOGS
Sponsor:	NSF National Science Foundation..
P.I.:	Melody Moore Jackson
Role:	CoPI, Design Lead
Amount Funded for Project:	\$499,352.00
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 PhD Students, 2 Masters Students
Period of Performance	01-SEP-2015 to 31-AUG-2017
Contributions:	Building on our FIDO work Zeagler initiated a study of canine's use of touchscreens. This lead to a publication. Zeagler wrote the NSF grant, which we submitted to get funding to pursue a larger research in the area of dogs' use of touchscreens. He helps run meetings and review papers before they are sent to publication. He mentors student teams on user studies. He helped write IRB and IACUC protocols.
15. Title:	FIDO Project: Facilitating Interaction for Dogs with Occupations
Sponsor:	NSF: HCC: SMALL: FIDO-ON-DOG INTERFACES: WEARABLE COMPUTING FOR TWO WAY COMMUN..
P.I.:	Melody Moore Jackson
Role:	Senior Investigator, Design Lead
Amount Funded for Project:	\$499,258.00
Number and Rank of Persons Supervised:	1 Research Scientist II, 4 PhD Students, 9 Masters Students
Period of Performance	15-SEP-2013 to 31-AUG-2016
Contributions:	Zeagler initiated the conversations to begin this project. Working with Thad Starner and Melody Jackson he conceptualized to build wearable interfaces for working dogs and assistant dogs. He helped design initial prototypes and help lead a team of research scientists, masters students, PhD students, from across multiple departments. This initial work, has lead to numerous grants and tangential research projects totaling over 1 million in funding and numerous publications. Zeagler helps run meetings and review papers before they are sent to publication. He mentors student teams on user studies. He helped write IRB and IACUC protocols. Zeagler helped wrote large portions of the NSF grant.
16. Title:	Electronic Textile Interface Swatch Book

Sponsor:	NEA National Endowment for the Arts
P.I.:	Thad Starner
Role:	Senior Investigator, Design Lead
Amount Funded for Project:	\$20,000
Number and Rank of Persons Supervised:	1 Research Scientist I, 2 Masters Students, 1 Undergraduate Student
Period of Performance	01-JAN-2012 to 31-DEC-2012 (Performance)
Contributions:	Building on Gvu Seed Grant funding, Zeagler Co-authored and completely wrote the first draft of the grant. Shepherded the grant through GT OSP and coordinated with NEA to complete all necessary forms and requirements. He organized a series of workshops using the ESwatchBook at design schools. The work was documented in academic conference papers.

17. Title:	Textile Interface Research
Sponsor:	ETRI
P.I.:	Thad Starner
Candidate's Role:	Senior Investigator, Design Lead
Amount Funded for Project:	\$202,046.00 (over three grants)
Number and Rank of Persons Supervised:	1 Research Scientist I, 3 Masters Students, 1 Undergraduate Student
Period of Performance	June 2009 to Jan 2012
Contributions:	The over arching research here was in how to create conductive material embroidery on textiles to act as on-body interfaces. Zeagler helped write the grants and organized masters students to help create interfaces and run user studies. He also was an integral part of designing new interfaces, using new sensing techniques, and leading to a patent.

18. Title:	HCC: Small: Passive Tactile Learning and Rehabilitation
Sponsor:	NSF National Science Foundation..
P.I.:	Thad Starner
Role:	Task Leader / Design for Physical Rehabilitation “MMT Therapeutic”
Amount Funded for Project:	\$500,000 Funded. (9/2012)
Amount Funded for Task:	\$10,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 4 Masters Students, External Collaborators
Period of Performance	March-April 2013

Spear headed an effort to make the gloves easier to use for rehabilitation.

MMT Therapeutic was featured the Well-Tech design exhibition in Milan Italy during Salone De Mobile 2013. The project received Attestato di Riconoscimento from the award committee.

Contributions:

The MMT Therapeutic glove is designed to be easy to wear for a person with limited sensation and dexterity. The glove is used passively. It teaches the wearer the “muscle memory” of a song by vibrating the correct fingers in time to a song as the user performs daily tasks. Our studies show that learning and rehabilitation effects occur with or without the audio of the song. The glove provided is programmed to teach Beethoven’s “Ode to Joy.”

In current medical practice, rehabilitation is considered to have little effect after a year past injury, and insurance rarely pays for continued rehabilitation past this point. All our participants improved sensation in their hands significantly through using MMT. One study participant even regained the ability to type with multiple fingers; another could button his own shirt again.

Examples of Internally (Georgia Tech) Funded Programs as Supervisor

1. Title:	Future of Work and Home Healthcare Robotics
Sponsor:	IRIM/IPaT FY22 Seed Grant
PI:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount Funded:	\$21,285
Number and Rank of Persons Supervised:	1 Research Technician, 1 Undergraduate Research Assistant
Period of Performance:	Spring / Summer 2022

Contribution to Proposal: Zeagler authored the proposal. Zeagler lead the team building efforts and workshops.

2. Title:	Future of Work / Building Teams
Sponsor:	Executive Vice President for Research FY21 Seed Grant
PI:	Clint Zeagler
Role:	PI
Budgetary Authority?	Yes
Amount Funded:	\$36,745
Number and Rank of Persons Supervised:	1 Research Technician, 1 Undergraduate Research Assistant
Period of Performance:	Spring / Summer 2022

Contribution: Zeagler authored the proposal. Zeagler lead the team building efforts and workshops.

3. Title:	Nostalgic Futures: 25 years of Creating Tomorrow
Sponsor:	IPaT / GVU Engagement Grant
P.I.:	Clint Zeagler
Role:	PI, Project Manager
Budgetary Authority?	Yes
Amount Funded for Project:	~\$25,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 Research Associate, 1 Graduate Research Student
Period of Performance	August 2017 – November 2017

Contributions: Zeagler authored the grant and coordinated the development of the exhibition. Developed submission forms, and facilitated the creation of graphic content. Working with student researchers to create an e-book and media worthy content. Working with collaborators to write a journal article on future technology.

4. Title:	#CreativeColisions
Sponsor:	IPaT / GVU Engagement Grant
P.I.:	Laura Levy
Role:	CoPI, Project Manager of Wearable Tech Garment
Budgetary Authority?	Yes
Amount Funded for Project:	~\$28,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 Research Associate,
Period of Performance	August 2016 - March 2017

Zeagler worked with Levy to run workshops and focus groups around using wearable technology in the Arts Specifically the performing arts. Zeagler lead the team that created a performance garment, in collaboration with and for dancer Katherine Helen Fisher. Zeagler also worked with Levy to coordinate collaboration with GT Office of the Arts, and build a relationship with Arts@GT which will last beyond this initial endeavor.

Contributions:



5. Title:	The Shawl
Sponsor:	IPaT
P.I.:	Clint Zeagler
Role:	PI, Project Manager,
Budgetary Authority?	Yes
Amount Funded for Project:	~\$3,000
Number and Rank of Persons Supervised:	1 Research Scientist II, 1 Research Associate, 1 PhD. Student, 2 Masters Student,
Period of Performance	1 week in May 2016

The "Professor on Fire" shawl was designed by Clint Zeagler (WCC Program Manager), Jessica Pater, and Ceara Byrne to be worn by Elizabeth Mynatt while being recognized as an ACM Fellow. The shawl acts as a personal spotlight, reacting to the noise of applause with pulsing light. Zeagler designed the interaction and worked with Byrne and Scott Gilliland to develop the programming and hardware. Zeagler worked with Pater to choose yarn and create the pattern and textile for the Shawl. Zeagler managed the team, timeline, and process.

Contributions:



6.	Title:	Facilitating Interactions for Dogs with Occupations FIDO
	Sponsor:	GVU Seed Grant
	P.I.:	Melody Moore Jackson, Clint Zeagler, Thad Starner
	Role:	CoPI,
	Budgetary Authority?	Yes
	Subtask Title?	Design Lead
	Amount Funded for Project:	\$25,000
	Number and Rank of Persons Supervised:	1 RSII, 1 GRA Student
	Period of Performance	Fall 2013-Spring 2014
	Contributions:	Zeagler initiated the conversations to begin this project and wrote the first draft of the GVU Seed Grant. Working with Thad Starner and Melody Jackson he conceptualized to build wearable interfaces for working dogs and assistant dogs. He helped design initial prototypes and helped lead a team of research scientists, masters students, PhD students, from across multiple departments. This initial work, has lead to numerous grants and tangential research projects totaling over 1 million in funding and numerous publications. Zeagler helps run meetings and review papers before they are sent to publication. He mentors student teams on user studies. He helped write IRB and IACUC protocols.

7. Title:	Electronic Textile Interface Swatch Book
Sponsor:	GVU Seed Grant
P.I.:	Clint Zeagler, Thad Starner
Role:	Project Manager, CoPI
Budgetary Authority?	Yes
Amount Funded for Project:	\$18,000
Number and Rank of Persons Supervised:	2 Masters Student, 1 Undergraduate Student
Period of Performance	Fall 2011

Zeagler helped write this grant. He also led the design of the ESwatchBook.

Contributions:



B. Additional Supervisory Responsibilities

Interim Co-Director of Strategic Partnerships

As the Co-Director of Strategic Partnerships for the Institute of People and Technology Zeagler engages industry on behalf of IPaT. Fostering, nurturing, and managing corporate sponsors and research partners. Zeagler interfaces with the Office of Sponsored Projects and GT Legal building relationships with industry through contract negotiations, Data Use Agreements (including FERPA and other sensitive data), and NDAs. In his role, Zeagler also helps plan and promote IPaT's Convergence Innovation Competition in the Fall and Spring, helping bring on competition judges from industry and enterprise. Zeagler has initiated a system of meeting with each of the IPaT core research faculty to understand research directions and focus out-facing efforts around productive research themes.

Future of Work at the Human Technology Frontier IPaT Initiative

Noticing the opportunities developing in the topic of Future of Work FOW Zeagler began to spearhead and initiative within IPaT to catalog current IPaT and Georgia Tech efforts in FOW and begin to build teams to go after funding. Zeagler applied for and was awarded two internal Georgia Tech seed grants to bolster this team build effort. Through developing and leading workshops and fostering and nurturing cross campus relationships in the last year, Zeagler has been able to support two interdisciplinary grant applications with more on the way. Zeagler began to lead this effort as recognized by IPaT in 2021 and will continue to promote development in FOW in his new role as Interim Director of Strategic Partnerships.

Wearable Computing Center WCC- Program Manager

Zeagler was an integral part of setting up the Wearable Computing Center WCC, meeting with Maribeth Gandy Coleman and Peter Presti its co-directors before the center's creation to help write and shape its charter. As the Program manager Zeagler has acted on behalf of the WCC as an outward facing ambassador for the center's endeavors, forging new relationships with industrial partners. He has also developed and promoted the many events the center has put forth since its inception in 2013. In doing so he has organized and worked with administrative assistants, undergraduate and graduate research assistants, research scientists, research associates, and research technicians.

The WCC Research Scientists work closely with Tenure Track Faculty to bring in sponsored projects and research efforts funding Graduate Research Assistants, Undergraduate Research Assistants, class projects, and student endeavors. Zeagler works to nurture these relationships across the Georgia Tech campus, not just within the College of Computing but also with designers and engineers from College of Design and College of Engineering. The WCC works with STEM experts at Georgia Tech Research Institute to involve them in the ongoing high school educational opportunities surrounding the WCC Exhibition and in developing new high school and middle school curriculum. The WCC also works with policy experts at the Georgia Tech Center for Advanced Communications Policy, producing academic papers to set the stage for how wearable technology might affect policy in the future. A large part of the WCC's early success has been Zeagler's attitude of inclusion and relationship building internally within the Georgia Tech community.

Under Zeagler's management the Wearable Computing Center has had significant outreach and research development:

- Wearing The Future – Expert panel series at Museum of Design Atlanta to accompany WCC Exhibition. Five panels over Fall 2016, live webcast and archived. Averaged over 60 attendees at each panel.
- WCC Forum 2014 - Over 200 people (Faculty, Students, Industry, External Academics) participated in the forum, which included an expert panel with members from Adidas, University of Minnesota, Microsoft Research, Jawbone, and Georgia Tech. (Zeagler)
- WCC Forum 2015 - Over 200 people (Faculty, Students, Industry, External Academics) participated in the forum, which included an expert panel with members from Virginia Tech, and APX Labs. (Zeagler)
- Free Wearable Technology Musical Concert held in Tech Square for the public; invited Italian Artist Rho played a WCC designed e-textile instrument to a crowd of over 100 people. (Zeagler)
- WCC Engagement Grants 2014 - Using the 2014 Tides Grant we were able to fund a number of seed grants for graduate and undergraduate projects in the area of wearable technology. (Zeagler, Presti, Gandy-Coleman)
- Wearables in the Wild Appalachian hiking wearable hackathon (sponsored and organized by WCC)
- Wearable Computing Exhibition *On You: A Story of Wearable Computing* - During the past 2 years our exhibition has traveled Internationally to Tianjin, China, Georgia Tech Atlanta Georgia, and the Computer History Museum in Mountain View California (currently visited by over 50,000 people) (Zeagler)
- Free E-Book - Our free e-book and companion to the traveling exhibition *Meeting the Challenge: The Path Towards a Consumer Wearable Computer* available now on apple iBooks, and Amazon (Zeagler)
- Design and Wearable Technology Symposium - Over 150 people attended this weekend event co-sponsored by WCC and the Georgia Tech School of Industrial Design. WCC helped coordinate the Sparkfun Sponsored Wearable Workshop, and also facilitated travel and invitations for the keynote Rhemi Post from Samsung and expert panel members. (Zeagler)
- Zeagler invited to participate on Wearable Tech Panel at Grace Hopper 2014
- Wear and Tear - A wearable workshop held at the International Symposium on Wearable Computers held in Osaka, Japan. The workshop had over 50 participants and covered how to make wearable technology robust enough to handle real world applications. (Presti, Zeagler, and Gilliland)
- CSE Innovation Summit, Event Jan 23, 2015 demos. Gandy-Coleman, Presti, and Zeagler gave invited keynote talk "Wearable Bootcamp"
- Presentation and booth at the Pecan Farmer's Annual Meeting, March 2015, Perry, Georgia. (Presti)
- Wearable Technology Policy Research and Journal Papers - *Innovation and Wearable Computing: A Proposed Framework for Collaborative Policy Design* P Baker, M Coleman, C Zeagler in IEEE Internet Computing

WEARING *THE* FUTURE A SERIES

HEALTH
July 28th

ATHLETICS
Aug 6th

INDUSTRY
Aug 27th

ART & MEDIA
Sept 22nd

FASHION
Sept 29th

Georgia Tech | Wearable Computing Center | MODA

photo by Zane Cochran

***FIDO (Facilitating Interactions for Dogs with Occupations)
/ Animal Computer Interaction Lab – Design Lead***

Zeagler along with Thad Starner and Melody Moore Jackson started to research how working dogs might aid from the use technology after Zeagler initially met with a dog-vest company and brought the idea to Starner and Jackson. Zeagler designed the initial prototypes and lead the design of additional prototypes.

Zeagler then spearheaded the effort to research a dog’s ability to use touch screen interfaces. Designing testing interfaces, which mimicked classic HCI and Human Factors tests. Not only is Zeagler an integral part of research protocol and program decisions, he also manages numerous PhD and Masters Students on multiple research endeavors surrounding the FIDO research.

The FIDO project led to over 1 Million in funding. It also led to the creation of the Animal Computer Interaction Lab at which Zeagler also acts in a design leadership role.

III. SPONSORED PROGRAM DEVELOPMENT

A. Research Proposals External Grants /

1. Title:	Privacy-preserving Wearable Temperature Monitoring and Infection Detection in Adult Aggregate Living – Nursing Homes (NH) and Assisted Living (AL) - with Homomorphic Encryption
Sponsor:	NSF ERC for Connected Eldercare Planning Project (Pilot Project)
GT PI:	Jun Ueda, Clint Zeagler
Role:	Co-PI
Amount Requested:	\$25,000
Date Submitted:	May 2022
Funding Level:	Out for Review
Contribution to Proposal:	Though Zeagler’s FOW initiative in IPaT he was able to help in forming this team with researchers across campus to aid in writing this grant. He helped write portions of the grant developing aspects of the research protocol. The team extends beyond GT with the inclusion of Toni Miles (Faculty, Morehouse School of Medicine). Zeagler and Miles helped develop the user study protocol for this small pilot project.
2. Title:	FW-HTF-R: Empathic Technology to Enable Craft Labor in the Hybrid Construction Workplace of the Future
Sponsor:	NSF
GT PI:	Javier Irizarry
Role:	Senior Investigator / Co-Author of Grant
Amount Requested:	\$1,999,739
Date Submitted:	March 2022
Funding Level:	Out for Review
Contribution to Proposal:	Though Zeagler’s FOW initiative in IPaT he was able to help in forming this team with researchers across campus to aid in writing this grant. He helped write portions of the grant developing aspects of the research protocol.

3. Title:	Enhancing Social Engagement through Online Gameplay for Older Adults with and without Mild Cognitive Impairment
Sponsor:	NIH SBIR
GT PI:	Maribeth Gandy Coleman
Role:	Senior Investigator / Co-Author of Grant
Amount Requested:	Total - \$2.547,524 / GT Share \$776,821
Date Submitted:	August 2021 Grant award number is: 1R44AG078009-01
Funding Level:	Total - \$2.547,524 / GT Share \$776,821 Grant award number is: 1R44AG078009-01
Contribution to Proposal:	Worked with Oneclick Potluck LLC external partner to create the research strategy with portions of the grant proposal. Met regularly to develop a robust plan for the NIH proposal. Created GT IRB to match and work with Emory partners so that funding could be received.
4. Title:	Notification and Display for Sensor Enabled PPE
Sponsor:	Ansell
PI:	Clint Zeagler
Role:	PI
Amount Requested:	~\$149,250.00
Date Submitted:	September 2021
Funding Level:	Starting Jan 2023 / Funding still in process
Contribution to Proposal:	Zeagler met with Ansell creating the research relationship. He coordinated the research grant writing the Statement of Work. Due to a delay from the sponsor (but still enthusiastic interest) we are moving forward with a Master Agreement with Georgia Tech that I am helping facilitate.
5. Title:	Rehabilitation Engineering Research Center on Wireless Technologies and Applications (Wireless RERC)
Sponsor:	NIDILRR
PI:	Nathan Moon
Role:	Co-Author
Amount Requested:	~4,000,000
Date Submitted:	April 2021
Funding Level:	Not Funded
Contribution to Proposal:	Zeagler wrote and created the dissemination and training sections of the grant which scored well in review.

6. Title:	Cognitive AR Toolkit: Manipulating Augmented Reality to Enhance Healthcare Work Environments
Sponsor:	Cisco Systems
PI:	Maribeth Gandy Coleman
Role:	Co-Author
Amount Requested:	\$172,022
Date Submitted:	Jan 2021
Funding Level:	\$172,022
Contribution to Proposal:	Zeagler worked with team to develop and write the research protocol. Specifically the user study and qualitative research approach for interviewing healthcare workers. Zeagler also wrote and maintains the IRB.
7. Title:	Wearing The Future Panel Series Gift
Sponsor:	Atlanta Braves
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$5,000
Date Submitted:	October 2016
Funding Level:	\$5,000
Contribution to Proposal:	Zeagler helped form relationship with Braves which lead to the gift in support of the panel series.
8. Title:	Textile Interface Research and Workshops Gift
Sponsor:	BMW
PI:	Clint Zeagler & Peter Presti
Role:	Co-PI
Amount Requested:	\$50,000 GIFT
Date Submitted:	August 2016
Funding Level:	\$50,000 GIFT
Period of Performance:	Sept 2016 – December 2016
Contribution to Proposal:	Zeagler Co-authored the gift letter, application, and conversation. He created initial research packet to explain his e-textile research to the sponsor.
9. Title:	Research Into the Future of Elevator User Interface and Experience
Sponsor:	Thyssen Krupp Elevator Americas/Atlanta, GA
PI:	Maribeth Gandy
Role:	Co-PI
Amount Requested:	\$148,455.00
Date Submitted:	Dec 2015
Funding Level:	\$148,455

Contribution to Proposal:	Co-authored SOW. Developed research plan for design workshops and presented reports and findings to Thyssen Krupp.
10. Title:	NASA Johnson Space Center Wearable Technology Symposium Student Travel Grant 2016
Sponsor:	NASA Georgia Space Grant Consortium
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$3,118
Date Submitted:	July 2015
Funding Level:	\$3,118
Period of Performance:	Jan 2016 – June 2016
Contribution to Proposal:	Authored and wrote grant for student travel, bringing 8 students to JSC to present NASA mentored student projects in Wearable Technology.
11. Title:	Wearable Technology Jewelry Research
PI:	Clint Zeagler
Sponsor:	SunJewels
Role:	PI
Amount Requested:	\$25,000 GIFT
Date Submitted:	11/15/2014
Funding Level:	\$25,000 GIFT
Contribution to Proposal:	Zeagler developed the relationship with SunJewels through a presentation at the World Economic Forum, and he acquired the gift to further his work in wearable technology.
12. Title:	Traveling Wearable Exhibit
PI:	Clint Zeagler
Sponsor:	Google
Role:	PI
Amount Requested:	\$24,483.81 GIFT
Date Submitted:	12/16/2014
Funding Level:	\$24,483.81 GIFT
Contribution to Proposal:	Zeagler is co-curator for a traveling exhibition. He organized the gift from Google to cover travel and time.
13. Title:	CHS: Small: Dog Touch-Touchscreen Interfaces For Working Dogs
Sponsor:	National Science Foundation
PI:	Melody Moore Jackson & Clint Zeagler

Role:	CoPI
Amount Requested:	\$499,352.00
Date Submitted:	Dec 2014
Funding Level:	\$499,352.00
Period of Performance:	01-SEP-2015 to 31-AUG-2017 (Performance)
Contribution to Proposal:	Co-authored and completely wrote the first draft of the grant. This work builds on my personal work with dogs using touchscreens.

14. Title:	NASA Johnson Space Center Wearable Technology Symposium Student Travel Grant 2015
Sponsor:	NASA Georgia Space Grant Consortium
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$13,000
Date Submitted:	July 2014
Funding Level:	\$9,000
Period of Performance:	Jan 2015 – June 2015
Contribution to Proposal:	Authored and wrote grant for student travel, bringing over 15 students to JSC to present NASA mentored student projects in Wearable Technology.

15. Title:	Tides Foundation Wearable Computing Center WCC Gift
Sponsor:	Tides Foundation
PI:	Peter Presti
Role:	Co-PI
Amount Requested:	\$100,000.00 GIFT
Date Submitted:	September 2014
Funding Level:	\$100,000.00 GIFT
Period of Performance:	Sept 2014 – Sept. 2015
Contribution to Proposal:	Co-authored the gift letter, application, and conversation. Money went to support WCC operations, WCC Engagement Grants, WCC Forum 2014, and WCC Wear and Tear Workshop at the International Symposium on Wearable Computers ISWC.

16. Title:	NASA Johnson Space Center Wearable Technology Symposium Student Travel Grant 2014
Sponsor:	NASA Georgia Space Grant Consortium
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$13,000
Date Submitted:	July 2013
Funding Level:	\$13,000

Period of Performance:	Jan 2014 – June 2014
Contribution to Proposal:	Authored and wrote grant for student travel, bringing over 20 students to JSC to present NASA mentored student projects in Wearable Technology.
17. Title:	HCC: Small: Fido-On-Dog Interfaces: Wearable Computing For Two Way Communication.
Sponsor:	NSF National Science Foundation
PI:	Melody Moore Jackson
Role:	Senior Investigator, Design Lead, Grant Co-Author
Amount Requested:	\$499,258.00
Date Submitted:	Dec 2012
Funding Level:	\$499,258.00
Period of Performance:	15-SEP-2013 to 31-AUG-2016 (Performance)
Contribution to Proposal:	Co-authored the grant, helping generate project ideas and research protocol.
18. Title:	NASA Johnson Space Center Wearable Technology Symposium Student Travel Grant 2013
Sponsor:	NASA Georgia Space Grant Consortium
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$13,000
Date Submitted:	July 2012
Funding Level:	\$13,000
Period of Performance:	Jan 2013 – June 2013
Contribution to Proposal:	Authored and wrote grant for student travel, bringing over 20 students to JSC to present NASA mentored student projects in Wearable Technology.
19. Title:	Electronic Textile Interface Swatch Book
Sponsor:	NEA National Endowment for the Arts
PI:	Thad Starner
Role:	Senior Investigator / Co-Author
Amount Requested:	\$100,000
Date Submitted:	May 2011
Funding Level:	\$20,000
Period of Performance:	01-JAN-2012 to 31-DEC-2012 (Performance)
Contribution to Proposal:	Co-authored and completely wrote the first draft of the grant. Shepherded the grant through GT OSP and coordinated with NEA to complete all necessary forms and requirements.

20. Title:	On-The-Go Interactions: Textile Interfaces And Tactile Feedback
Sponsor:	ETRI Korea
PI:	Thad Starner
Role:	Senior Investigator / Co-Author
Amount Requested:	\$64,000.00
Date Submitted:	July 2010
Funding Level:	\$64,000.00
Period of Performance:	01-AUG-2010 to 28-JAN-2011 (Performance)
Contribution to Proposal:	Co-authored SOW and research proposal. Developed research plan and presented reports and findings to ETRI.
21. Title:	Interface Textiles: Integrating Conductive Ink And Conductive Embroidery...
Sponsor:	ETRI Korea
PI:	Thad Starner
Role:	Senior Investigator / Co-Author
Amount Requested:	\$77,986.00
Date Submitted:	March 2011
Funding Level:	\$77,986.00
Period of Performance:	01-May-2011 to 31-Jan-2012 (Performance)
Contribution to Proposal:	Co-authored SOW and research proposal. Developed research plans and presented reports and findings to ETRI.
22. Title:	Textile Interfaces And Tactile Feedback
Sponsor:	ETRI Korea
PI:	Thad Starner
Role:	Senior Investigator / Co-Author
Amount Requested:	\$60,000.00
Date Submitted:	April 2009
Funding Level:	\$60,000.00
Period of Performance:	01-JUN-2009 to 31-JAN-2010 (Performance)
Contribution to Proposal:	Co-authored SOW and research proposal. Developed research plans and presented reports and findings to ETRI.

B. Internal Grants / Sponsorships (Georgia Tech) Approved and Funded

1. Title:	Determining moments of necessary intervention for young people with emotional and behavioral difficulties utilizing wearable technology.
Sponsor:	CHOA / GT Pediatric Research Endowment
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$50,000
Date Submitted:	July 2022
Funding Level:	Out for Review
Period of Performance:	2022/ 2023

Contribution to Proposal: Authored the grant.

2. Title:	Gender Knit
Sponsor:	GVU Engagement Grant
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$38,979
Date Submitted:	June 2022
Funding Level:	Out for Review
Period of Performance:	2022 / 2023

Contribution to Proposal: Authored the grant.

3. Title:	Future of Work and Home Healthcare Robotics
Sponsor:	IRIM/IPaT FY22 Seed Grant
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$21, 285
Date Submitted:	November 2021
Funding Level:	\$21,285
Period of Performance:	Spring 2022

Contribution to Proposal: Authored the grant.

4. Title:	Future of Work / Building Teams
Sponsor:	Executive Vice President for Research FY21 Seed Grant
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$36,745
Date Submitted:	October 2021
Funding Level:	\$36,745
Period of Performance:	Spring / Summer 2022

Contribution to Proposal: Authored the grant.

5. Title:	Nostalgic Futures Exhibition
Sponsor:	GVU Engagement Grant
PI:	Clint Zeagler
Role:	PI
Amount Requested:	\$25,000
Date Submitted:	June 1, 2017
Funding Level:	\$25,000
Period of Performance:	Fall 2017

Contribution to Proposal: Authored the grant.

6. Title:	Collision of Creatives
Sponsor:	GVU Engagement Grant
CoPIs:	Laura Levy, Maribeth Gandy, Clint Zeagler, Madison Cario, Lane Conville-Canney, Wayne Li
Role:	CoPI
Amount Requested:	\$28,311
Date Submitted:	June 1, 2016
Funding Level:	\$28,311
Period of Performance:	Fall 2016-Spring 2017

Contribution to Proposal: Co-authored the grant, helping include scientific merit and validation methods.

7. Title:	Meeting the Challenge: The Path Towards A Consumer Wearable Computer E-Book
Sponsor:	GVU Engagement Grant
PI:	Clint Zeagler
Role:	PI
Date Submitted:	May 2014
Amount Requested:	\$25,000
Funding Level:	\$25,000
Period of Performance:	Fall 2014
Contribution to Proposal:	Wrote proposal and completed work on developing E-Book

8. Title:	Facilitating Interactions for Dogs with Occupations FIDO
Sponsor:	GVU Seed Grant
CoPIs:	Melody Jackson, Clint Zeagler, Thad Starner
Role:	CoPI
Amount Requested:	\$25,000
Date Submitted:	May 2013
Funding Level:	\$25,000
Period of Performance:	Fall 2013-Spring 2014

Contribution to Proposal: Co-authored the grant (writing the bulk of the protocol) and act as design lead for project.

9. Title:	Electronic Textile Interface Swatch Book
Sponsor:	GVU Seed Grant
CoPIs:	Clint Zeagler, Thad Starner
Role:	CoPI
Amount Requested:	\$18,000
Date Submitted:	May 2011
Funding Level:	\$18,000
Period of Performance:	Fall 2011

Contribution to Proposal: Co-authored the grant, helping write and develop the project work.

10. Title:	Inventure Labs (rapid prototyping)
Sponsor:	Technology Fee Proposal
CoPIs:	Thad Starner, Clint Zeagler, Craig Forrest
Role:	CoPI / Co-Author
Amount Requested:	\$125,382
Date Submitted:	June 2010
Funding Level:	\$120,000
Contribution to Proposal:	Co-authored the grant. The funding was used to help create the GVU Prototyping Lab, the lab is open to all students and GVU research faculty. Feeding into the Inventure Labs system the GVU Prototyping Lab helps aid in interdisciplinary innovation.

IV. TEACHING

A. Academic Courses Taught

Semester	Course	Institution	Students Enrolled	CIOS Response%/ Overall effectiveness score (5 is most effective)
Fall 2023	CS 3751 Human Computer Interaction/ User Interface Design	GT	163	N/A
Summer 2023	CS 7470 OMS Mobile and Ubiquitous Computing	GT	92	93% / 4.1
Summer 2023	CS 4605 / 7470 Mobile and Ubiquitous Computing	GT	29	79% / 4.5
Summer 2023	CS 3750 User Interface Design	GT	40	N/A
Spring 2023	CS 3001 Computing and Society	GT	304	91% / 4.6
Fall 2022	CS 3001 Computing and Society	GT	304	94% / 4.6
Summer 2022	CS 7470 OMS Mobile and Ubiquitous Computing	GT	21	N/A
Summer 2022	CS 4605 / 7470 Mobile and Ubiquitous Computing	GT	27	N/A
Summer 2022	CS 3001 Computing and Society	GT	62	27% / 4.7
Summer 2022	CS 3750 User Interface Design	GT	3	N/A
Spring 2022	LMC 8803 Visual Fundamentals	GT	17	N/A
Spring 2022	CS 3873 Human Computer Interaction	GT	199	23% / 3.7
Spring 2022	CS 3001 Computing and Society	GT	197	N/A
Summer 2021	CS 3750 User Interface Design	GT	8	50% / 4.5
Summer 2021	CS 7470 Mobile and Ubiquitous Computing	GT	22	14% / 5
Summer 2021	CS 4873 Computers and Society	GT	129	36% / 4.5
Spring 2021	LMC 8803 Visual Fundamentals	GT	11	45% / 4
Fall 2020	CS 3750 User Interface Design	GT	44	25% / 4.6
Summer 2020	CS 3750 User Interface Design	GT	17	35% / 4.75
Summer 2020	CS 4001 Computing and Society	GT	48	21% / 4.25
Summer 2020	CS 7470 Mobile and Ubiquitous Computing	GT	7	30% / 4.75
Summer 2020	CS 4605 Mobile and Ubiquitous Computing	GT	13	30% / 4.75
Spring 2020	LMC 8803 Visual Fundamentals	GT	21	N/A
Spring 2020	CS 3750 User Interface Design	GT	71	N/A
Fall 2019	CS 3750 User Interface Design	GT	39	51% / 3.22
Fall 2019	CS 4001 Computing and Society	GT	42	38% / 4.58
Summer 2019	CS 4001 Computing and Society	GT	42	52% / 4.9

Summer 2019	CS 7470 Mobile and Ubiquitous Computing	GT	5	100% / 4.9
Summer 2019	CS 4605 Mobile and Ubiquitous Computing	GT	4	100% / 4.9
Spring 2019	CS 4001 Computing and Society	GT	42	55% / 4.9
Spring 2019	LMC 8803 Visual Fundamentals	GT	23	87% / 4
Fall 2018	LMC 4803 Wearable Technology and Society New Course / Developed by Clint Zeagler	GT	11	63% / 5
Summer 2018	CS 4605 Mobile and Ubiquitous Computing	GT	7	100% / 4.8
Summer 2018	CS 7470 Mobile and Ubiquitous Computing	GT	7	100% / 4.92
Summer 2017	CS 4605 Mobile and Ubiquitous Computing	GT	16	94% / 4.85
Fall 2016	ID 8900 Special Topics	GT	1	100% / 5
Fall 2016	ID 4510 / ID 8900 WPD Wearable Product Design	GT	17/2 = 19	94% / 4.83 100% / 4.5
Spring 2016	ID 4823 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	9/9 = 18	78% / 4.1 89% / 4.5
Spring 2016	ID 8900 Special Topics	GT	1	100% / 5
Fall 2015	ID 4510 / ID 8900 WPD Wearable Product Design	GT	11/2 = 13	91% / 4.9 100% / 4.5
Spring 2015	ID 4823 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	3/1 = 4	100% / 4.8 100% / 4
Fall 2014	ID 4510 / ID 8900 WPD Wearable Product Design	GT	10/5 = 15	100% / 4.8 100% / 5
Spring 2014	ID 4823 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	5/5 = 10	100% / 4.7 100% / 4.3
Spring 2014	COA 1012 Fund Design & Built Env II	GT	13	100% / 4.4
Fall 2013	ID 4510 / ID 8900 WPD Wearable Product Design	GT	8/6 = 14	88% / 4.3 100% / 4.2
Fall 2013	COA 1011 Fund Design & Built Env I	GT	12	92% / 4.8
Spring 2013	ID 4823 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	5/8 = 13	100% / 4.3 88% / 4.6
Fall 2012	ID 4510 Wearable Product Design	GT	3	67% / 5
Spring 2012	ID 3012 Intermediate Design II	GT	9	11%
Spring 2012	ID 4510 / ID 8900 WPD Wearable Product Design New Course / Developed by Zeagler	GT	12/3 = 15	33% / 3 67% / 4.5
Summer, 2012	ID 3011 Intermediate Design I	GT	4	75% / 4.8
Fall 2011	ID 2011 Intro to Design I	GT	16	50% / 3
Spring 2011	ID 4823 MUE / ID 8900 MUE Mobile User Experience New Course / Developed by Zeagler	GT	7/4 = 11	43% / 4 50% / 3.5
Spring 2011	ID 2012 Intro to Design II	GT	13	62% / 3.8
Fall 2010	ID 4833 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	9/7 = 16	25% / 4.5 56% / 4.1
Fall 2010	ID 2011 Intro to Design I	GT	13	31% / 3.5
Summer 2010	FASM 220 Fashion Merchandising, Planning & Control	Savannah College of Art and Design SCAD	15	N/A
Spring 2010	FASM 220 Fashion Merchandising, Planning & Control	SCAD	15	N/A
Spring 2010	FASH 105 Intro to Textiles (2 sections)	SCAD	30	N/A
Spring 2010	ID 4901 Spec Prob: Mentor Program	GT	1	N/A
Spring 2010	ID 2012 Intro to Design II	GT	16	19% / 3
Winter 2010	FASH 105 Intro to Textiles	SCAD	15	N/A
Winter 2010	FASH 110 Intro to Fashion Design	SCAD	15	N/A
Fall 2009	FASH 105 Intro to Textiles (2 sections)	SCAD	30	N/A
Fall 2009	ID 4833 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing	GT	6/4 = 10	33% / 4 25% / 4

Fall 2009	ID 4901 Spec Prob: Mentor Program	GT	1	0%
Fall 2009	ID 2011 Intro to Design I	GT	17	6%
Summer 2009	FASH 110 Intro to Fashion Design	SCAD	15	N/A
Summer 2009	FASH 105 Intro to Textiles	SCAD	15	N/A
Spring 2009	FASH 105 Intro to Textiles	SCAD	15	N/A
Spring 2009	ID 2012 Intro to Design II	GT	16	25% / 4.5
Spring 2009	ID 4202 / ID 8900PP Professional Practice	GT	38/7	26% 43%
Winter 2009	FASH 105 Intro to Textiles	SCAD	15	N/A
Fall 2008	FASH 105 Intro to Textiles	SCAD	15	N/A
Fall 2008	ID 2011 Intro to Design I	GT	16	25% / 4.5
Fall 2008	ID 4833 MUC Wearable Design now co-located CS 4605 / CS 7407 Mobile and Ubiquitous Computing and merge classes for interdisciplinary project teams. New Course / Developed by Clint Zeagler & Thad Starnier	GT	4	0%
Spring 2008	ID 3803BUS / ID 8900BUS Business of Design New Course / Developed by Clint Zeagler	GT	12	25% / 3.8
Fall, 2007	ID 4833 / ID 8900WD Wearable Design New Course / Developed by Clint Zeagler	GT	10/7 = 17	28% / 4.5

B. Curriculum Development

CS 7470 Online Masters Course Mobile and Ubiquitous Computing
(in collaboration with Gregory Abowd, Thad Starner, and Thomas Plotz)

LMC 4830 Wearable Technology and Society

ID 4823 MUC / ID 8900 MUC Designing Mobile and Ubiquitous Computing

ID 4510 / ID 8900 WPD Wearable Product Design

ID 4823 MUE Mobile User Experience

ID 3803BUS Business of Design

ID 4833 Wearable Design

C. Continuing Education Courses Developed and Taught

I have helped develop a series of courses in collaboration with STEM@GTRI for Georgia High School Teachers to take virtually. These courses walk High School STEM educator through a Human Centered Design Project Based Learning curriculum with assets they can use in their classes.

Topics Include:

1. Wearable Technology Design for Healthcare Applications
2. Material Science for Athletic Applications

D. Individual Student Guidance & Development

D.1 PhD students supervised (on thesis committee)

1. Nicole Kosoris – Validity of Virtual Reality Stand ins for Augmented Reality Experiences.

D.2 MS students supervised (on thesis committee)

1. Nia Lindsay – Spring 2018 MSHCI – Providing a framework for fostering creativity while preserving the integrity of transitioning communities (Advisor)
2. Becky Scheel - Spring 2017 MSDM – Animal Computer Interaction (on thesis committee)
3. Reema Upadhyaya - Spring 2017 MSHCI– Topic Wearable Tech (on thesis committee)
4. Yoni Kaplan – Spring 2015 MSID- Parametric design of a living hinge for lightweight modular structures (on thesis committee)
5. Ceara Byrne – Spring 2013 MSID- Design of an E-Textile Sleeve for Tracking Knee Rehabilitation for Older Adults (on thesis committee)
6. Halley Profita – Spring 2011 MSID- Social acceptability of wearable technology use in public: an exploration of the societal perceptions of a gesture-based mobile textile interface (on thesis committee)

D.3 MS Special Problems

1. Tanvi Singh – Fall 2016 - On-Body Textile Based Interfaces
2. Nivedita Arora –Spring 2016 - Design and evaluation of custom ear electrode and Google Glass interface for Mobile-Wearable Brain Computer Interface ID 8900 CCZ – Clint Zeagler
3. Arjun Srinivas – Fall 2015 – On-Body Textile Based Interfaces ID 8900 Special Topics – Clint Zeagler
4. Sarthak Ghosh – Spring 2015 - On-Body Textile Based Interfaces Thad Starner on record

D.4 Undergraduate Special Problems

1. Rohan Bowa – Summer 2021 – Wearable Technology Designer’s Web Tool CS 4699– Maribeth Gandy on Record
2. Maria Wong Sala – Spring 2016 – MODA Exhibit Design CS 4699 – Thad Starner on record
3. Nicholas Bitzis – Spring 2016 – MODA Exhibit Design CS 4699 – Thad Starner on record
4. Ryan Shields – Spring 2010 – On-Body Textile Based Interfaces ID 4901 Spec Prob: Mentor Program
5. Noah Posner – Fall 2009 – On-Body Textile Based Interfaces ID 4901 Spec Prob: Mentor Program

D.5 Graduate Research Assistants

1. Rishabh Ghora – Spring 2021 – Wearable Technology Designer’s Web Tool
2. Jay Zuerndofer – Fall 2015 & Spring 2016 Animal Computer Interaction – Touchscreen Interactions
3. Andrea Lau – Spring 2016 - Animal Computer Interaction – Touchscreen Interactions
4. Alan Zhang – Fall 2015 & Spring 2016- On-Body Textile Based Interfaces

D.6 Undergraduate Research Assistants

1. Eric Chang – IPaT Summer Intern 2022– AI- Caring MCI and the Kitchen / Future of Work and Home Healthcare Robotics
2. Daniel Kheen – IPaT Summer Intern 2021 – Wearable Technology Designer’s Web Tool
3. Xueting (Nika) Zhang – On-Body Interface User Studies
4. Maria Wong Sala – Wearable Technology E-Book
5. Nicholas Komor – On-Body Interface User Studies

E. Teaching Awards

1. Georgia Tech Research Faculty Teaching Fellowship Awardee 2018. Selected by the Georgia Institute of Technology’s Executive Vice President for Research to receive a grant to develop a new course in Wearable Technology and Society.
2. Georgia Tech Class of 1934 Outstanding use of Technology in Education Award (2013 with Thad Starner)
3. Georgia Tech. Nominated for Outstanding Use of Innovative Technologies in Teaching Award, 2012.

V. SYNERGISTIC ACTIVITIES

A. Membership on Boards

1. Fashion Group International, Atlanta Executive Board Educational Programming Chair 2020
2. Fashion Group International, Atlanta Executive Board Treasurer 2016 - 2019
3. Museum of Design Atlanta, Board of Directors, 2009-2010
4. Fashion Over Atlanta, Co-Chair 2009

B. Honors

1. **Georgia Tech Emerging Leaders Program 2023-2024 cohort.**
2. ISWC International Symposium on Wearable Computers **10 Year Impact Award 2023** for paper: Jackson, Melody Moore, **Clint Zeagler**, Giancarlo Valentin, Alex Martin, Vincent Martin, Adil Delawalla, Wendy Blount et al. "FIDO-facilitating interactions for dogs with occupations: wearable dog-activated interfaces." In Proceedings of the 2013 International Symposium on Wearable Computers, pp. 81-88. ACM, 2013.
3. **GVU Impact Award 2022** - In 2007, GVU launched the Impact Awards to recognize individuals who have been instrumental in building a deeper understanding of human perspectives on technology, in envisioning and creating the technological landscape of the future, or in shaping and supporting our community. The Impact Awards were presented again in 2012 and in 2017. This year, to commemorate the 30th anniversary of the founding of the GVU Center, we are again honoring and celebrating the contributions of a handful of passionate, skillful, and committed individuals. Each of the individuals featured in this booklet embodies the interdisciplinary mindset and real-world impact that is a hallmark of GVU.
4. Named one of **Georgia Tech's 30 under 30** by Georgia Tech Alumni Magazine 2007
5. Voted **Best Atlanta Fashion Designer 2007**, Creative Loafing Magazine
6. Voted **Best Atlanta Fashion Designer 2006**, Creative Loafing Magazine