

Items relevant to the PTR evaluation period (Jan 1st 2021-Dec 31st 2025) are highlighted in blue text.

EAKTA JAIN

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Website: <https://faculty.eng.ufl.edu/jain/>

EDUCATION

Ph.D. (Robotics) 2006 – 2012

Carnegie Mellon University, Pittsburgh PA

Thesis: Attention-guided Algorithms to Retarget and Augment Animations, Stills, and Videos

M.S. (Robotics) 2006-2010

Carnegie Mellon University, Pittsburgh PA

B.Tech. (Electrical Engineering) 2002-2006

Indian Institute of Technology Kanpur, India

EXPERIENCE

Associate Professor (2021-present)

Department of Computer & Information Science & Engineering, University of Florida

Visiting Researcher (Summer 2024)

Boston Dynamics AI Institute, Cambridge MA

ACM Senior Member (2024-present)

Visiting Scientist (Spring 2022)

Center for Child Health, Behavior and Development, Seattle Children's Research Institute, Seattle WA

Assistant Professor (2014-2021)

Department of Computer & Information Science & Engineering, University of Florida

Member Technical Staff (2012-2014)

Texas Instruments Embedded Signal Processing Lab, Dallas TX

Systems Software Engineer (2012)

Texas Instruments, Dallas TX

Graduate Research Assistant (2006-2012)

Robotics Institute, Carnegie Mellon University, Pittsburgh PA

Lab Associate (2012, 2010, 2008)
Disney Research Pittsburgh, Pittsburgh PA

Graduate Intern (2007)
Walt Disney Animation Studios, Burbank CA

**SELECTED
LEADERSHIP
EXPERIENCE**

[L.7] Tenure letter writer for two tenure-track junior faculty at research-active programs (2024-25)
[L.6] ACM SIGGRAPH Executive Committee (Chair 2024-25, Director 2022-2024) (*For SIGGRAPH, Chair is equivalent to SIG President for other ACM SIGs*)
[L.5] CRA Leadership Academy (2025)
[L.4] ACM ETRA Technical Program Chair (2020)
[L.3] ACM SAP Steering Committee Member (2022-2024), Technical Program Chair (2021)
[L.2] UF Transportation Institute Human Factors Group Lead (2020-2023)
[L.1] One of the founding faculty members who conceptualized and designed the UF HCC (Human Centered Computing) PhD program (circa 2015-16)

**HONORS AND
AWARDS**

[AW.8] Chair of PhD Committee for IEEE VGTC Best Dissertation presented to Brendan David-John at IEEE VR 2025
[AW.7] Keynote talk, ACM Symposium on Motion, Interaction and Games (MIG) (2024)
[AW.6] Keynote talk, Pacific Graphics (2024) (invited, unable to accept due to university/state mandated travel restrictions)
[AW.5] Keynote talk, IEEE VR 2024 2nd Annual Workshop on Multi-modal Affective and Social Behavior Analysis and Synthesis in Extended Reality (MASSXR) (2024)
[AW.5] ACM Senior Member (2024 onwards; recognition of the top 25 percent of ACM Professional Members for their demonstrated excellence in the computing field.)
[AW.4] Best Paper Nomination, IEEE VR (2021)
[AW.3] Honorable Mention Best Paper, ACM Symposium on Applied Perception (2012)
[AW.2] Best Paper Award, ACM Symposium on Computer Animation (2010)
[AW.1] Finalist, Google Anita Borg Memorial Scholarship (2008)

FUNDING

[F.16] Meta Unrestricted Research Gift (PI, 2024-2025)
"Multimodal VR/AR/XR Privacy"
Total: \$127,000, PI share: \$103,000
[F.15] National Institute for Mental Health **R01** (PI, 2024-2029)

“AVAIL: Anonymization of Videos using AI for Large scale data sharing”

Total: \$3.9M, PI share: \$3.7M

[F.14] National Science Foundation **Frontiers** (Co-PI, 2022-2027)

“Collaborative Proposal: SaTC: Frontier: Securing the Future of Computing for Marginalized and Vulnerable Populations”

Total: \$7.5M, PI share: \$759,721

[F.13] Meta Privacy-Enhancing Technologies Award (PI, 2022-2023)

“Mitigating Threat of Re-Identification from Eye Tracking Data”

Total: \$100000, PI share: \$50,000

[F.12] National Science Foundation (PI, 2022-2023)

“FWHTF-P: Advancing the future work of nuclear operators through virtual reality-based training REU Supplement”

Total: \$16000, PI share: \$16000

[F.11] National Science Foundation (PI, 2021-2022)

“FWHTF-P: Advancing the future work of nuclear operators through virtual reality-based training REU Supplement”

Total: \$16000, PI share: \$8000

[F.10] Google (PI, Faculty adviser, 2020-2021)

“2020-2021 Google Fellowship in Human Computer Interaction - Brendan David-John”

Total: \$33630. PI share: \$33630

[F.9] USDOT Inclusive Design Challenge Stage 1 Prize (Co-PI, 2021-2022)

“Optimizing Highly Automated Driving Systems for People with Cognitive Disabilities”

Total: \$300000, Co-PI share: \$51271

[F.8] National Institute of Mental Health (NIMH) R21 (PI, 2020-2022)

“Protecting the privacy of the child through facial identity removal in recorded behavioral observation sessions”

Total: \$416496, PI share: \$218697

[F.7] National Science Foundation (PI, 2020-2021)

“FWHTF-P: Advancing the future work of nuclear operators through virtual reality-based training”

Total: \$149999, PI share: \$120667

[F.6] University of Florida Informatics Institute Seed Fund (Co-PI, 2020)

“Adapting In-Store Theft Prevention Technology to Detect Malicious Coughing and Product Tampering”

Total: \$10844, Co-PI share: \$3600

[F.5] University of Florida Informatics Institute Seed Fund (Co-PI, 2020-2021)

“Assessing Political Representation using Neural Networks”

Total: \$29455, Co-PI share: \$2000

[F.4] Florida Department of Transportation (PI, 2018-2020)

“I-STREET Initiative: Evaluation of Intelligent School Zone Beacon and Vehicle-Cyclist Detection and Warning System”

Total: \$226808, PI share: approx \$120000

[F.3] National Science Foundation CRII: RI 1566481 (PI, 2016-2018)

“CRII: RI: Learning to Predict the Temporal Interestingness of Videos”

Total: \$182634, PI share: \$182634

[F.2] YouTube Faculty Research Award (PI, 2016-2021)

Total: \$100000, PI share: \$100000

[F.1] Facebook Oculus Research Gift (PI, 2016-2018)

Total: \$25000, PI share: \$25000

**PRESS
COVERAGE**

Radio shows and podcasts: BBC World Service (Unexpected Elements), Horsing Around, Robots for the Rest of Us.

News coverage: UF News, Science News, Science Daily, Equus magazine

**PUBLICATIONS
(JOURNALS)**

BLUE

HIGHLIGHTS

MARK THE

EVALUATION

PERIOD JAN 1ST

2021—DEC 31ST

2025

[J.19] Towards Privacy-preserving Photorealistic Self-avatars in Mixed Reality, Wilson, E., Sheikholeslam, S., Joerg, S., Bindschaedler, V., Butler, K., Jain, E. (accepted with major revisions) *IEEE Transactions on Visualization and Computer Graphics*

[J.18] Toward Multimodal Privacy in XR: Design and Evaluation of Composite Privatization Methods for Gaze and Body Tracking Data, Ibragimov, A., Wilson, E., Butler, K., **Jain, E.** (2026) *IEEE Transactions on Visualization and Computer Graphics* (TVCG).

[J.17] Extending the Heilmeier Catechism to Evaluate Security and Privacy Systems: Who is Left Out? Butler, K., Hugenberg, K., **Jain, E.**, Kapadia, A., Kohno, T., Redmiles, E., Roesner, F., Sim, M., Traynor, P., Barakat, H. (2025) *IEEE Security & Privacy*.

[J.16] Opto-diversity and Eye Tracking: Assumptions about ocular alignment in virtual reality eye tracking exclude users with strabismus and amblyopia, Murphy, S., Sampath, S., Wilson, E., LaRubbio, K., Smith, E., Kapadia, A., **Jain, E.** (2025) *ACM Transactions on Applied Perception*

[J.15] Privacy-Preserving Gaze Data Streaming in Immersive Interactive Virtual Reality: Robustness and User Experience, Wilson, E., Ibragimov, A., Proulx, M., Tetali,

- S. D., Butler, K. and **Jain, E.** (2024) *IEEE Transactions on Visualization and Computer Graphics*, vol. 30, no. 5, pp. 2257-2268.
- [J.14]** Towards mitigating uncann(eye)ness in face swaps via gaze-centric loss terms, Wilson, E., Shic, F., Joerg, S., **Jain, E.** (2024) *Computers and Graphics Journal Special Issue: Eye Gaze Visualization, Interaction, Synthesis, and Analysis*.
- [J.13]** Privacy-preserving datasets of eye-tracking samples with applications in XR, David-John, B., Butler, K., **Jain, E.** (2023) *IEEE Transactions on Visualization and Computer Graphics (TVCG) Special Issue on IEEE VR*. (p1-p11)
- [J.12]** Is the Avatar Scared? Pupil as a Perceptual Cue, Dong, Y., Joerg, S., **Jain, E.** (2022) *Computer Animation and Virtual Worlds (CAVW)*.
- [J.11]** Online Hazard Recognition Training: A Comparative Case Study of Static Images, Cinemagraphs, and Videos, Eiris, R., **Jain, E.**, Gheisari, M., Wehle, A. (2021) *ASCE Journal of Construction Engineering and Management*, vol 147, issue 8.
- [J.10]** A privacy-preserving approach to streaming eye-tracking data, David-John, B., Hosfelt, D., Butler, K., **Jain, E.** (2021) *IEEE Transactions on Visualization and Computer Graphics (TVCG) Special Issue on IEEE VR*. **Best Paper Nominee**
- [J.9]** The Security-Utility Trade-off for Iris Authentication and Eye Animation for Social Virtual Avatars, John, B., Koppal, S., Joerg, S., **Jain, E.** (2020) *IEEE Transactions on Visualization and Computer Graphics (TVCG) Special Issue on IEEE VR*. (p1-p11)
- [J.8]** A Benchmark of Four Methods for Generating 360° Saliency Maps from Eye Tracking Data, John, B. and Le Meur, O. and **Jain, E.** (2019) *International Journal of Semantic Computing* 13.03 (2019)
- [J.7]** Using Audience Physiology to Assess Engaging Conservation Messages and Animal Taxa, **Jain, E.**, Jacobson, S., Raiturkar, P., Morales, N., Nagarajan, A., Chen, B., Sivasubramanian, N., Chaturvedi, K., and Lee, A., *Society & Natural Resources* (2019).
- [J.6]** Love or Loss: Effective message framing to promote environmental conservation, Jacobson, S., Morales, N., Chen, B., Soodeen, R., Moulton, M. and **Jain, E.** (2018). *Applied Environmental Education & Communication*.
- [J.5]** Creating Segments and Effects on Comics by Clustering Gaze Data, Thirunarayanan, I. Khetarpal, K., Koppal, S., Le Meur, O., Shea, J., **Jain, E.** (2017). *ACM Transactions on Multimedia Computing Communications and Applications (TOMM)*, 13(3), Article 24.
- [J.4]** Is the Motion of a Child Perceivably Different from the Motion of an Adult? **Jain, E.**, Anthony, L., Aloba, A., Castonguay, A., Cuba, I., Shaw, A. and Woodward, J. (2016). *ACM Transactions on Applied Perception (TAP)*, 13(4), Article 22.
- [J.3]** Predicting Moves-on-Stills for Comic Art Using Viewer Gaze Data, **Jain, E.** Sheikh, Y., Hodgins, J. (2016). *IEEE Computer Graphics and Applications (CG&A)*, 36(4), p34-p45.

[J.2] Gaze-driven Video Re-editing, **Jain, E.**, Sheikh, Y., Shamir, A. and Hodgins, J., (2015), *ACM Transactions on Graphics (TOG)* (34, p21:1-p21:12).
 [J.1] Three-dimensional Proxies for Hand-drawn Characters, **Jain, E.**, Sheikh, Y., Mahler, M., and Hodgins, J. (2012), *ACM Transactions on Graphics (TOG)* (31, p8:1-p8:16).

PUBLICATIONS
(PEER REVIEWED
CONFERENCES
AND SYMPOSIA)
BLUE
HIGHLIGHTS
MARK THE
EVALUATION
PERIOD JAN 1ST
2021—DEC 31ST
2025

[C.24] “I Had Sort of a Sense that I Was Always Being Watched...Since I Was”: Examining Interpersonal Discomfort From Continuous Location-Sharing Applications, Childs, K., Gibson, C., Crowder, A., Warren, K., Stillman, C., Redmiles, E., **Jain, E.**, Traynor, P., Butler, K. (2024) *Proceedings of the 2024 on ACM SIGSAC Conference on Computer and Communications Security (CCS)*.
 [C.23] Real-Time Conversational Gaze Synthesis for Avatars, Canales, R., **Jain, E.**, Joerg, S. (2023) *Proceedings of ACM Symposium on Motion, Interaction and Games (MIG)*.
 [C.22] Introducing Explicit Gaze Constraints to Face Swapping, Wilson, E., Shic, F. and **Jain, E.** (2023) *Proceedings of ACM Symposium on Eye Tracking Research & Applications (ETRA)*.
 [C.21] Horse as Teacher: How human-horse interaction informs human-robot interaction, **Jain, E.** and Gardner-McCune, C. (2023) *ACM Conference on Human Factors in Computing Systems (CHI)*.
 [C.20] For Your Eyes Only: Privacy-preserving eye-tracking datasets, David-John, B., Butler, K., **Jain, E.** (2022) *Proceedings of ACM Symposium on Eye Tracking Research & Applications (ETRA)*.
 [C.19] Adult2child: Motion Style Transfer using CycleGANs, Dong, Y., Aristidou, A., Shamir, A., **Jain, E.** (2020) *ACM SIGGRAPH Conference on Motion, Interactions and Games (MIG)*.
 [C.18] FoveaCam: A MEMS Mirror-Enabled Foveating Camera, Tilmon, B., **Jain, E.**, Ferrari, S., Koppal, S. (2020) *IEEE International Conference on Computational Photography (ICCP)*.
 [C.17] Hazard-Recognition Training Using Omnidirectional Cinemagraphs: Comparison Between Virtual Reality and Lecture-based Techniques, Eiris, R., John, B., Gheisari, M., **Jain, E.**, Wehle, A. Memarian, B. (2020) In *Proceedings of the ASCE Construction Research Congress (CRC)*.
 [C.16] Eye Tracking and Virtual Reality, McNamara, A. and **Jain, E.** (2019) *SIGGRAPH Asia 2019 Courses*.
 [C.15] Differential Privacy for EyeTracking Data, Liu, A., Xia, L., Duchowski, A., Bailey, R., Holmqvist, K. and **Jain, E.** (2019) *Proceedings of ACM Symposium on Eye Tracking Research & Applications (ETRA)*.

- [C.14]** EyeVEIL: Degrading Iris Authentication in Eye Tracking Headsets, John, B., Koppal, S. and **Jain, E.** (2019) *Proceedings of ACM Symposium on Eye Tracking Research & Applications (ETRA)*.
- [C.13]** Quantifying Differences between Child and Adult Motion based on Gait Features, Aloba, A., Luc, A., Woodward, J., Dong, Y., Zhang, R., **Jain, E.**, and Anthony, L. (2019) *21st International Conference on Human-Computer Interaction. Invited paper*.
- [C.12]** An Evaluation of Pupillary Light Reflex Models for 2D Screens and VR HMDs, John, B., Raiturkar, P., Banerjee, A., **Jain, E.** (2018) *ACM Symposium on Virtual Reality Systems and Technology (VRST)*.
- [C.11]** A Preliminary Benchmark of Four Methods to Generate 360 Saliency Maps, John, B., Raiturkar, P., Le Meur, O., **Jain, E.** (2018) *First International Conference on Artificial Intelligence and Virtual Reality (AIVR)*.
- [C.10]** DeepComics: Saliency estimation for comics, Bannier, K., **Jain, E.** and Le Meur, O. (2018). *ACM Symposium on Eye Tracking Research & Applications (ETRA)*.
- [C.9]** How many words is a picture worth? Attention allocation on thumbnails versus title text regions, Yandandul, C., Paryani, S., Le, M. and **Jain, E.** (2018) *ACM Symposium on Eye Tracking Research & Applications (ETRA)*.
- [C.8]** Kinder-Gator: The UF Kinect Database of Child and Adult Motion, Aloba, A., Flores, G., Woodward, J., Shaw, A., Castonguay, A., Cuba, I., Dong, Y., **Jain, E.** and Anthony, L. *Eurographics 2018 Short Papers*.
- [C.7]** Adult2Child: Dynamic Scaling Laws to Create Child-like Motion, Dong, Y., Paryani, S., Rana, N., Aloba, A., Anthony, L., **Jain, E.** (2017) *ACM International Conference on Motion in Games (MIG)*, p13:1-p13:10.
- [C.6]** Decoupling Light Reflex from Pupillary Dilation to Measure Emotional Arousal in Videos, Raiturkar, P., Kleinsmith, A., Keil, A., Banerjee, A., and **Jain, E.** (2016) *ACM Symposium on Applied Perception (SAP)*, p89-p96.
- [C.5]** Predicting Primary Gaze Behavior Using Social Saliency Fields, Park, H. S., **Jain, E.** and Sheikh, Y. (2013) *International Conference on Computer Vision (ICCV)* (p3503-3510).
- [C.4]** 3D Social Saliency from Head-mounted Cameras, Park, H. S., **Jain, E.** and Sheikh, Y. (2012) *Advances in Neural Information Processing Systems (NIPS)* (p431-p439).
- [C.3]** Inferring Artistic Intention in Comic Art through Viewer Gaze, **Jain, E.**, Sheikh, Y. and Hodgins, J. (2012) *ACM Symposium on Applied Perception (SAP)* (p55-p62), [Best Paper Honorable Mention](#)
- [C.2]** Augmenting Hand Animation with Three-dimensional Secondary Motion, **Jain, E.**, Sheikh, Y., Mahler, M. and Hodgins, J. (2010) *ACM Symposium on Computer Animation (SCA)* (p93-p102), [Best Paper Award](#)

[C.1] Leveraging the Talent of Hand Animators to Create Three-Dimensional Animation, **Jain, E.**, Sheikh, Y. and Hodgins. J. (2009) *ACM Symposium on Computer Animation (SCA)* (p93-p102).

**PUBLICATIONS
(WORKSHOPS,
PEER-REVIEWED)**

[W.11] Rebellion and Disobedience in Human-Robot Interaction: Insights from human-horse interaction, **Jain, E.** and Bradford, C. J. (2024) *ACM HRI'24 Workshop on Rebellion and Disobedience in Human-Robot Interaction (RAD-HRI)*. Also presented as an invited talk at *AAMAS'24 Workshop on Rebellion and Disobedience in Human-AI Interaction (RAD-AI)*.

[W.10] Give me some room please! Personal space bubbles for safety and performance, LaRubbio, K., Wilson, E., Koppal, S., Joerg, S., **Jain, E.** (2023) *IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*.

[W.9] Who do you look like? Gaze-based authentication for workers in VR, LaRubbio, K., Wright, J., David-John, B., Enqvist, A., **Jain, E.** (2022) *IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*.

[W.8] Priorities and Considerations in Advancing the Training of Nuclear Reactor Operators through Mixed Reality, **Jain, E.** and Enqvist, A. (2021) Winter Meeting of the American Nuclear Society.

[W.7] Let's SOUP up XR: Collected thoughts from an IEEE VR workshop on privacy in mixed reality, David-John, B., Hosfelt, D., Butler, K., **Jain, E.** (2021) *VR4Sec: 1st International Workshop on Security for XR and XR for Security, co-located with USENIX/SOUPS 2021*. p1-p3.

[W.6] Let It Snow: Adding pixel noise to protect the user's identity, John, B., Liu, A., Xia, L., Koppal, S., **Jain, E.** (2020) *ACM Symposium on Eye Tracking Research and Applications (ETRA) Adjunct Proceedings: Workshop on Privacy and Ethics in Eye Tracking (PrEThics)*. p1-p3.

[W.5] Look Out! A Design Framework for Safety Training Systems and A Case Study on Omnidirectional Cinemagraphs, John, B., Kalyanaraman, S., **Jain, E.** (2020) *IEEE VR Workshops "TrainingXR"*. p1-p7.

[W.4] 3D Saliency from Eye Tracking with Tomography, Ma, B., **Jain, E.**, Entezari, A., *Workshop on Eye Tracking and Visualization (ETVIS) co-located with IEEE VIS. (Archived as a Springer book chapter in Eye Tracking and Visualization: Foundations, Techniques, and Applications in 2017.)*

[W.3] A Preliminary Benchmark of Four Saliency Algorithms on Comic Art, Khetarpal, K., **Jain, E.**, (2016) *IEEE International Conference on Multimedia and Expo Workshop on Multimedia Artworks and Analysis (MMArt)*. p1-p6.

[W.2] The Role of Undergraduate Research in an Undergraduate Engineering Curriculum, Donnelly, A., **Jain, E.**, Lopatto, D., Spooner, H., Ramjatan, S., Chun, G., (2016) *ATINER's Conference Paper Series ENGEDU2016-1957*

[W.1] EREL: a faster alternative to the list-based interfaces for tree exploration and searching in mobile devices, Chhetri, A.P., **Jain, E.**, Zhang, K. (2013) *Proceedings of the 6th International Symposium on Visual Information Communication and Interaction (VINCI)*.

**PUBLICATIONS
(ABSTRACTS,
REFEREED
UNLESS STATED
OTHERWISE)**

[A.6] Optimizing Automated Driving Systems for People with Cognitive Impairments. Koon, L., Akinwuntan, A., Bhattacharya, S., Davidow, A., Davidson, A., Depcik, C., Devos, H., Eskandar, M., Giang, W., Haug, J., Hu, B., **Jain, E.**, Kondyli, A., Kumar, D., Liu, Y., Motamedi, S., Yao, H., Zhao, X. (2022) *Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) Conference (non-refereed)*

[A.5] The Uncanniness of Face Swaps, Wilson, E., Persaud, A., Esposito, N., Joerg, S., Shic, F., Patra, R., Skytta, J., **Jain, E.** (2022) *Journal of Vision (Vision Science Society (VSS 2022) Abstract)*

[A.4] Style Translation to Create Child-like Motion, Dong, Y., Aloba, A., Anthony, L., and **Jain, E.** (2018) *Eurographics Posters*.

[A.3] Measuring viewers' heart rate response to environment conservation videos. Raiturkar P, Jacobson, S., Chen, B., Chaturvedi, K., Cuba, I., Lee, A., Franklin, M., Tolentino, J., Haynes, N., Soodeen, R., **Jain, E.** (2016) *ACM Symposium on Applied Perception (SAP)* (pp. 138-138). Selected as one of the posters to be presented along with SIGGRAPH ACM Student Research Posters.

[A.2] Scan path and movie trailers for implicit annotation of videos. Raiturkar, P., Lee, A., **Jain, E.** (2016) *ACM Symposium on Applied Perception (SAP)* (pp. 141-141).

[A.1] Leveraging gaze data for segmentation and effects on comics. Thirunarayanan, I., Koppal, S., Shea, J., **Jain, E.** (2016) *ACM Symposium on Applied Perception (SAP)* (pp. 137-137). Selected as one of the posters to be presented along with SIGGRAPH ACM Student Research Posters.

**TECHNICAL
REPORTS**

[T.11] Human-in-the-loop Face Annotation Tool, Sampath, S., Dommer, K., Skytta, J., Corrigan, S., Michener, K., Shic, F., **Jain, E.** (2025)

[T.10] Evaluating Face Privacy via Stylized Painterly Rendering, Ercetin, E. and **Jain, E.** (2025)

[T.9] Transit drivers' reflections on the benefits and harms of eye tracking technology, Murphy, S., Grame, B., Smith, E., Srinivasan, S., **Jain, E.** (2024)
<https://arxiv.org/abs/2410.24131>

[T.8] Eye-tracked Virtual Reality: A Comprehensive Survey on Methods and Privacy Challenges, Bozkir, E., Suleyman, O., Wang, M., David-John, B., Gao, H., Butler, K., **Jain, E.**, Kasneci, E. (2023) <https://arxiv.org/abs/2305.14080>

[T.7] DeepLabCut-Display: open-source desktop application for visualizing and analyzing two-dimensional locomotor data in livestock”. Shirey, J., Smythe, M. P., Dewberry, L. S., Allen, K., **Jain, E.**, Brooks, S. (2023) bioRxiv; Technical Note. DOI: 10.1101/2023.10.30.564795.

[T.6] In-vehicle alertness monitoring for older adults, Yao, H., Motamedi, S., Giang, W., Kondyli, A., **Jain, E.** (2022) <https://arxiv.org/pdf/2208.08091.pdf>

[T.5] Annotation System for Aiding Automatic Face Detectors, Wilson, E., Skytta, J., Shic, F., **Jain, E.** (2021) *University of Florida Technical Report IR00011535*.

[T.4] Benchmarking Face Detectors, Wilson, E., Skytta, J., Shic, F., **Jain, E.** (2021) *University of Florida Technical Report IR00011536*.

[T.3] Evaluation of Intelligent School Zone Beacon and Vehicle-Cyclist Detection and Warning System. **Jain, E.**, Srinivasan, S., John, B., Adorno, P., Surampudi, S., Mahajan, T., Chopra, M., Domas, T., Ankomah, M., Letter, C. (2020). FDOT Project Report. URL: <https://trid.trb.org/view/1758620>

[T.2] Omnidirectional Cinemagraphs for Safety Training, John, B., Taylor, C.J., Kalyanaraman, S., **Jain, E.** (2019) *University of Florida Technical Report IR00010924*.

[T.2] Identifying Computer-Generated Faces: An Eye Tracking Study, Raiturkar, P., Farid, H., **Jain, E.** (2018) *University of Florida Technical Report IR00010525*.

[T.1] Who Watches the Watchmen: Eye tracking in XR, **Jain, E.** (2018) *Dagstuhl Seminar Position Paper*.

TEACHING

CAP6930 Generating Expressiveness for Intelligent Agents and Avatars (Spring 2025, Spring 2024)

CAP 4112 Generating Expressiveness for Intelligent Agents and Avatars (Fall 2022)

CAP 4621 Artificial Intelligence (Fall 2020, Fall 2019, Fall 2018, Fall 2017)

CAP 5108 Research Methods for Human-centered Computing (Spring 2023, 2020, 2019, 2018, 2017, 2016, 2015)

CIS 6930/4930 Human Centered Computer Graphics (Fall 2015, Fall 2014)

SELECTED ACADEMIC SERVICE

Associate Editor, ACM Computing Surveys (2025-28)

NIH Study Section: Special Emphasis Panel (SEP) on Clinical Data Management, Analysis, Informatics, and Digital Health (2025-26)

National Science Foundation, Panelist (2021, 2020, 2018, 2016), Adhoc (2020, 2017)

[ACM SIGGRAPH] Executive Committee Chair (equivalent to ACM SIG President) (2024-25), Executive Committee Director (2022-2025), International Technical Papers Committee (2021, 2018, 2017)

[ACM ETRA] Technical Papers Chair (2020), Posters Chair (2019), Area Chair (2019)

[ACM SIGGRAPH Asia] International Program Committee (2019), Technical Program COI Coordinator (2023)

[Eurographics] Posters Co-Chair (2018), International Program Committee (2018)

[ACM Symposium on Applied Perception (SAP)] Steering Committee Member (2022-2024), Technical Program Chair (2021) Conference Chair (2016), Steering Committee (2017, 2022, 2023), Program Committee (2023, 2020, 2019, 2018, 2015)

Guest Editor: ACM Transactions on Applied Perception (ACM TAP) (2023-25) Special Issue on “Eye Tracking at the Extremes”

Review Editor: Frontiers in Virtual Reality (2020-21)

Reviewer: ACM TOG, ACM TAP, ACM CSUR, ACM SIGCHI, ACM SIGGRAPH, ACM TOCHI, IEEE Trans. on Multimedia, IEEE S&P Magazine Special Issue on Security and Privacy for the Metaverse

Search Committee Member for ACM TAP Editor-in-Chief (2020-21)

Invited Panelist, WiGraph Berthouzoz Women in Graphics Lunch, SIGGRAPH 2025, 2024, 2021

IEEE VGTC Awards Committee (2022, 2023) (IEEE VR is a flagship conference for this IEEE Technical Committee)

IEEE VR Reviewer (2023), International Program Committee ()

Computing Innovation Fellows 2020 Reviewer

Moderator, graphics-worldwide (2017-2022)

Owner and moderator, privacy-and-security-xr-l: international listserv for privacy and security in mixed reality related topics hosted by the University of Florida (2021-present)

**SELECTED
INTERNAL
SERVICE**

UF College-level CISE Chair Search Committee and Department-level Search Committee for CISE Department Chair (2025-26)

UF CISE JAX Security and Privacy Hiring Committee (2025-26)

UF Transportation Institute Director Search Committee (2024-25)

UF Transportation Institute Human Factors Group Lead (2020-2023)

UF AI-CCS (AI in Center for Coastal Systems) Faculty Search Committee (2020-21)

UF CISE VR (Virtual Reality) Search Committee (2017-18)

UF Harn Museum of Art Faculty Council (2018-2020)

UF CISE HCC (Human-centered Computing) PhD Admissions Committee (circa 2016-present) (I was one of the founding faculty members who conceptualized and designed the HCC PhD program at UF)

- LECTURES/
SPEECHES/
PRESENTATIONS
(JAIN
PRESENTING)**
- [LSP.55]** *Human-Horse Partnership as a Model for Human-Robot Teaming*, Eakta Jain, Invited talk, Dynamics Days US 2026 at the University of Arizona, co-located with Horse Days, January 2026.
- [LSP.54]** *Human-Horse Partnership as a Model for Human-Robot Teaming*, Eakta Jain, Invited talk, Human-Agent Teaming and Horse-Human Partnerships (Horse Days) at the University of Arizona and Al Marah Equine Center, January 2026.
- [LSP.53]** *Interacting with Non-Human Intelligent Agents*, Eakta Jain, **Keynote talk** at ACM Motion, Interaction and Games (MIG) 2024
- [LSP.52]** *How human-horse interaction informs human-robot interaction*, Invited talk, Eakta Jain, Personal Robotics Group, MIT Media Lab
- [LSP.51]** *Privacy in XR: Perspectives from the Eye Tracking Frontlines*, Eakta Jain, MASSXR, IEEE VR 2024 Workshops. (**Keynote presentation**)
- [LSP.50]** *Frontiers Workshop: Digital Avatars: Risks, Harms, Barriers, Opportunities*, Eakta Jain, Apu Kapadia, ACM SIGGRAPH 2023. (Organizer, Invited presentation)
- [LSP.49]** *Rebellion and Disobedience in HRI: Insights from human-horse interaction*, Eakta Jain, J. Cortney Bradford, ACM Symposium on Human-Robot Interaction (HRI) Workshop on Rebellion and Disobedience in HRI (RAD-HRI), 2024. (Invited talk)
- [LSP.48]** *Rebellion and Disobedience in HRI: Insights from human-horse interaction*, Eakta Jain, J. Cortney Bradford, AAMAS (International Conference on Autonomous Agents and Multiagent Systems) 2024 Workshop on Rebellion and Disobedience in Artificial Intelligence (RAD-AI), 2024. (Invited talk)
- [LSP.47]** *How human-horse interaction informs human-robot interaction*, Eakta Jain, Johns Hopkins University, Applied Physics Lab, Dec 2023 (Invited talk)
- [LSP.46]** *How human-horse interaction informs human-robot interaction*, Eakta Jain, Boston Dynamics AI Institute, August 2023 (Invited talk)
- [LSP.45]** *How human-horse interaction informs human-robot interaction*, Eakta Jain, Army Research Lab, July 2023 (Invited talk)
- [LSP.44]** *How human-horse interaction informs human-robot interaction*, Eakta Jain, Amazon Robotics Robotalks Series, June 2023 (Invited talk)
- [LSP.43]** *Qualitative methods and Opto-diversity*, Guest lecture, Eakta Jain, Security and Privacy for Marginalized and Vulnerable Populations, taught by Dr. Kevin Butler, April 4th 2024.

- [LSP.42]** *Eye tracking in Healthcare and Medicine*, Panelists: Dimitri Christakis, Roman Bednarik, Amanda Bentley, Katarzyna Chawarska, Eakta Jain, Oleg Komogortsev, David Zee, ACM ETRA 2022 Panel, June 2022
- [LSP.41]** *Privacy, Safety and Well-being: Solutions for the Future of AR & VR*, Callie Holderman, Michael Running Wolf, Liv Erickson, Eakta Jain ACM SIGGRAPH 2022 Panels, August 2022
- [LSP.40]** *Overview of Human Factors at UFTI*, Eakta Jain, September 6 2022, Campus visit by Senator Keith Perry and Chief of Staff Suzy McGuire.
- [LSP.39]** *Horse as Teacher: How human-horse interaction informs human-robot interaction*, Eakta Jain, April 1st 2023, 2023 Spring DSI Symposium
- [LSP.38]** *PrXR: Towards a roadmap for privacy and security research for mixed reality applications*, IEEE VR 2021 Workshops, Eakta Jain, Brendan David-John, Kevin Butler, Diane Hosfelt. March 2021.
- [LSP.37]** *Locking Eyes*, Eakta Jain, Invited talk, University of California Riverside Computer Science and Engineering Colloquium, January 2021
- [LSP.36]** *Human factors research at UFTI: Current Research and Future Directions*, Eakta Jain, STRIDE Webinar, March 2021.
- [LSP.35]** Panelist, Interdisciplinary Research, HUM2930 Research and Creativity
- [LSP.34]** *User Security and Privacy in Pursuit of Compelling Virtual Avatars*, Eakta Jain, Invited talk at Stanford G-Cafe Seminar, Stanford University, June 2020
- [LSP.33]** *User Security and Privacy in Pursuit of Compelling Virtual Avatars*, Eakta Jain, Invited talk at MIT Graphics Seminar, Massachusetts Institute of Technology, August 2020
- [LSP.32]** *User Security and Privacy in Pursuit of Compelling Virtual Avatars*, Eakta Jain, Invited talk at CMU Graphics Seminar, Carnegie Mellon University, September 2020
- [LSP.31]** *ISTREET-Initiative: Evaluation of Intelligent School Zone Beacon and Vehicle-Cyclist Detection and Warning System*, Eakta Jain, STRIDE Webinar, September 2020.
- [LSP.30]** *Locking Eyes*, Eakta Jain, Invited seminar, Facebook Reality Labs: Research, November 2020
- [LSP.29]** *Security and Privacy in Pursuit of Compelling Virtual Avatars*, Eakta Jain*, University of Minnesota, Invited talk, March 2020, Twin Cities MN.
- [LSP.28]** *Security and Privacy in Pursuit of Compelling Virtual Avatars*, Eakta Jain*, Invited talk, March 2020, jointly hosted by the Department of Computer Science, RIT MAGIC Center, School of Interactive Games and Media, and Program of Computer Science, Rochester NY.
- [LSP.27]** *User Security and Privacy in Eye Tracking*, Eakta Jain*, Invited talk at Clemson University, School of Computing (SoC), February 2020, Clemson SC.

- [LSP.26]** *Challenges and Opportunities in Mixed Reality and Eye Tracking*, Eakta Jain* (2020) Outreach event for visiting Korean student group from Florida International College, hosted by Dr. Y.K. Yoon (ECE), Gainesville FL.
- [LSP.25]** *Differential Privacy for Eye Tracking Data*, Ao Liu , Lirong Xia*, Andrew Duchowski, Reynold Bailey, Kenneth Holmqvist and Eakta Jain* (2019) Proceedings of ACM Symposium on Eye Tracking Research & Applications (ETRA), Denver CO.
- [LSP.24]** *Omnidirectional Cinemagraphs for Safety Training*, Brendan John, C.J. Taylor, Sri Kalyanaraman, Eakta Jain* (2019) ACM SIGGRAPH Frontiers Workshop “Content Generation for Workforce Training”, Los Angeles CA.
- [LSP.23]** *Child2adult: Revisiting dynamic scaling laws to age motion*, Yuzhu Dong, Lisa Anthony, Eakta Jain* (2019) ACM Symposium on Applied Perception, Barcelona Spain.
- [LSP.22]** *Adult2Child Age Regression Using CycleGANs*, Thomas Domas, Yuzhu Dong, Brendan John, Ariel Shamir, Andreas Aristidou, Eakta Jain* (2019) ACM Symposium on Applied Perception, Barcelona Spain.
- [LSP.21]** *Eye tracking in 360: Methods, Challenges and Opportunities*, Eakta Jain* and Olivier Le Meur, IEEE Virtual Reality 2019, Osaka Japan. (Oral presentation associated with half-day tutorial)
- [LSP.20]** *Challenges and opportunities in motion and eye tracking*, Eakta Jain*, Invited talk, Indian Institute of Information Technology, Delhi India, March 2019.
- [LSP.19]** *Head, shoulder, knees and toes ... and eyes*, Eakta Jain*, Invited talk, Indraprastha Institute of Information Technology, Delhi India, March 2019.
- [LSP.18]** *The role of gaze and pupil diameter in understanding audience engagement*, Eakta Jain* (2018) MPI Informatik Saarbrücken. Saarbrücken Germany.
- [LSP.23]** *How many words is a picture worth? Attention allocation on thumbnails versus title text regions*, Yandandul, ChaitraG and Paryani, SachinG and Le, Madison and Eakta Jain* (2018) ACM Symposium on Eye Tracking Research & Applications (ETRA), Warsaw Poland. [Refereed proceedings publication selected for oral presentation as well as poster presentation as a result of being in the top 17% of reviewed manuscripts]
- [LSP.17]** *Empathetic AI: Assessing Users’ Engagement by Looking at their Eyes*, Eakta Jain*, (2018) CCC Computing Research Symposium, Washington DC.
- [LSP.16]** *Measuring viewer priorities in naturalistic settings*, Eakta Jain* (2018) UF ITE student chapter (Invited seminar), Gainesville FL.
- [LSP.15]** *Adult2Child: Dynamic Scaling Laws to Create Child-like Motion*, Eakta Jain* (2017) FIEA, UCF (Invited guest lecture), Orlando FL.
- [LSP.14]** *Human-centered Video Editing*, Eakta Jain* (2017) IRISA Rennes France.
- [LSP.13]** *Human-centered Video Editing*, Eakta Jain* (2017) B-COM Rennes France.

- [LSP.12]** *Human-centered Video Editing*, **Eakta Jain*** (2017) Technicolor Rennes France.
- [LSP.11]** *Human-centered Computer Graphics*, **Eakta Jain*** (2017) IRISA Rennes France.
- [LSP.10]** Measuring Viewer Reaction to Videos in Naturalistic Settings, Eakta Jain* (2017) UF Data Science and Informatics Symposium (Invited talk), Gainesville FL.
- [LSP.9]** Measuring Viewer Reaction to Videos in Naturalistic Settings, Eakta Jain* (2017) UF ACM student chapter (Invited talk), Gainesville FL.
- [LSP.8]** *Visual Attention from a Graphics Point of View* Eakta Jain*, Sumanta Pattanaik, Olivier Le Meur Eurographics 2016, Lisbon Portugal. (Oral presentation associated with half-day tutorial)
- [LSP.7]** Computer Graphics, Visual Perception, and Cinematography in Algorithms for Re-editing Widescreen Videos via Automatic Pans, Cuts, and Zooms, Eakta Jain* (2015) UF Data Science and Informatics Symposium (Invited), Gainesville FL.
- [LSP.6]** Human-centered Computer Graphics, Eakta Jain* (2015) UF Marston Library iSTEAM lecture series (Invited), Gainesville FL.
- [LSP.5]** Gaze-driven Video Re-editing, Eakta Jain*, Yaser Sheikh, Ariel Shamir, Jessica Hodgins. (2015) ACM SIGGRAPH, Los Angeles CA.
- [LSP.4]** Three-dimensional Proxies for Hand-drawn Characters, Eakta Jain*, Yaser Sheikh, Moshe Mahler, Jessica Hodgins (2012) ACM SIGGRAPH, Los Angeles CA.
- [LSP.3]** Inferring Artistic Intention in Comic Art through Viewer Gaze, Eakta Jain*, Yaser Sheikh, Jessica Hodgins (2012) ACM Symposium on Applied Perception (SAP), Los Angeles CA.
- [LSP.2]** Augmenting Hand Animation with Three-dimensional Secondary Motion, Eakta Jain*, Yaser Sheikh, Moshe Mahler, Jessica Hodgins (2010) ACM Symposium on Computer Animation (SCA), Madrid Spain.
- [LSP.1]** Leveraging the Talent of Hand Animators to Create Three-Dimensional Animation, Eakta Jain*, Yaser Sheikh, Jessica Hodgins (2009) ACM Symposium on Computer Animation (SCA), Los Angeles CA.

- PHD COMMITTEE CHAIR**
- [C.6]** Ekin Ercetin (Human Centered Computing, expected graduation 2030)
 - [C.5]** Arihant Yadav (Human Centered Computing, expected graduation 2029)
 - [C.4]** Shakthi Sampath ((Human Centered Computing, expected graduation 2029)
 - [C.3]** Ethan Wilson (Computer Science, graduated 2025, University of Florida Graduate School Pre-eminence Awardee, 2020-21 Generation Next Scholar) [currently at a stealth startup]

[C.2] Brendan John (Computer Science, 2022, NSF Graduate Research Fellow, Google PhD Research Fellow, L3Harris Graduate Fellow) [currently Assistant Professor at VirginiaTech]

[C.1] Yuzhu Dong (Human-Centered Computing, 2020, Gartner Group Graduate Fellow) [placed as Research Engineer at Google Deep Mind]

PATENTS

Eye tracking apparatuses configured for degrading iris authentication, Inventors: Eakta Jain, Sanjeev Jagannatha Koppal, Brendan Matthew John U.S. Patent No. 11079843, 2021.

System and method for augmenting hand animation with three-dimensional secondary motion, Inventors: Jessica Hodgins, Eakta Jain, Yaser Sheikh, U.S. Patent No. 8988422, 2015