

Jeeun Kim – Curriculum Vitae (personal website: <https://jeeunkim.com/>)

Assistant professor

Department of Computer Science & Engineering

College of Engineering, Texas A&M University

Director of HCIed Lab ([link](#))

Co-founder of TxHCI Seminar Series

Affiliated Faculty, Texas A&M Institute of Data Science (TAMIDS, [link](#))

Employment

| | |
|----------------|--|
| 2019 - present | Assistant professor, Texas A&M University |
| 2018 Summer | Research Intern, Adobe |
| 2017 Summer | Research Intern, Ericsson |
| 2013 Summer | S/W Engineering Intern, JumpCloud Inc. |
| 2010 - 2012 | Project Manager, Korea Telecom (KT), Korea |
| 2009 - 2010 | Research Intern, HCI group, LG, Korea |
| 2008 Winter | Engineering Intern, Samsung, Korea |

Education

Ph.D., Computer Science, 2019

University of Colorado, Boulder, CO (Advisor: Tom Yeh)

Visiting Ph.D. Scholar, School of Computer Science, 2016

Carnegie Mellon University, Pittsburgh, PA (Host: Jennifer Mankoff, Scott Hudson)

B.S., Computer Engineering, 2010 Summa Cum Laude (Top 1% of class)

Korea Aerospace University, South Korea

Exchange Program, Computer Science, 2006 (Honorary Alumnus)

Yanbian University of Science & Technology, China

Awards & Honors (Selected)

2025, College of Engineering TEES Young Faculty Fellow

2024, Montague-Center for Teaching Excellence Scholar

2024, NSF CAREER Award

2021, Ralph E. Powe Junior Faculty Award

2020, ACM UIST Best Paper Honorable Mention

2020, 8th Heidelberg Laureate Forum Young Researcher

2018, Adobe Research Fellowship

2017, Rising Stars in EECs at Stanford

2017, ACM UIST Doctoral Consortium, Selected Participant

2014, Early Career Development Award, CS Department, University of Colorado

2013, Beverly Sears Graduate Student Scholarship

2013, Grace Hopper Scholar by Walmart, Anita Borg Institute

2010, Presidential Award, the Best Contributor of the Year, Korea Telecom (KT Corp.), Korea

2010, The Best Business Model Planner Award, Korea Telecom (KT Corp.), Korea

2010, Chancellor's Award for the Class of 2010, Korea Aerospace University, Korea

2009, Best Undergrad Thesis Award, CS Department, Korea Aerospace University, Korea
2007 & 2009, Jeong-Seok Foundation Scholarship (Top 1 student in the CS Department), Korea
2004-2009 Merit Scholarship for Excellent Academic Records, Korea Aerospace University, Korea
2007, ISTAT Foundation Scholarship (8 students around the world)
2006, Honorary Alumnus, Yanbian University of Science and Technology, China
2005, Han-Jin Foundation Scholarship, Korea

*Special recognition for Excellent Reviews (UIST 2017, CHI 2018, CHI 2023, UIST 2024)

Refereed Publications

*Denotes Kim's advisee at Texas A&M

Journals

[P.41] Himani Deshpande*, Haruki Takahashi, [Jeeun Kim](#). *Unmake to Remake: Materiality-driven Rapid Prototyping*. (2024) ACM Transactions on Computer-Human Interaction (ToCHI, Presented at UIST'24). Impact Factor: 4.8

[P.40] Aryabhat Darnal*, Kanak Rajiv Mantri, Will Betts, [Jeeun Kim](#), Negar Kalantar, & Anastasia Muliana. *Flexibility, Toughness, and Load Bearing of 3D-Printed Chiral Kerf Composite Structures*. (2024) In Composite Part B, Elsevier. Impact Factor: 13.1

[P.39] Nahyun Kwon*, Tong Sun, Yuyang Gao, Xu Wang, Liang Zhao, Sungsoo Ray Hong, [Jeeun Kim](#). *3DFIX: Improving Remote Novices' 3D Printing Troubleshooting Experience through Human-AI Collaboration Design*. (2024). In Proceedings of the ACM on Human-Computer Interaction 8 (Presented at CSCW'24)

[P.38] Richard Lawrence, Zhenhua He, Dhruva K. Chakravorty, Wesley Brashear, Honggao Liu, Sandra B. Nite, Lisa M. Perez, Chris P. Francis, Nikhil Dronamraju, Xin Yang, Teresh Guleria, & [Jeeun Kim](#). *Cybersecurity and Data Science Curriculum for Secondary Student Computing Programs*. (2023). Journal of Computational Science Education. Vol. 14, Issue 2. Impact Factor: 3.817

[P.37] Abul Al Arabi*, Xue Wang, Yang Zhang, & [Jeeun Kim](#). *E3D: 3D Printing Energy Harvesting Attachments from Everyday Kinetic Interactions*. (2023). In Proceedings of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (UbiComp'23)

[P.36] Aryabhat Darnal*, Zaryab Shahid, Himani Deshpande*, [Jeeun Kim](#), Anastasia Muliana. *Tuning Mechanical Properties of 3D Printed Composites with PLA:TPU Programmable Filaments*. (2023). In Composite Structures, Elsevier. Impact Factor: 6.603

[P.35] Jason Orlosky, Misha Sra, Kenan Bektaş, Huaishu Peng, [Jeeun Kim](#), Nataliya Kos'myna, Tobias Hollerer, Anthony Steed, Kiyoshi Kiyokawa, Kaan Akşit. *Telelife: The Future of Remote Living*. (2022). In Frontiers in Virtual Reality. Impact Factor: 3

[P.34] Jennifer Mankoff, Megan Hofmann, Xiang 'Anthony' Chen, Scott E Hudson, Amy Hurst, [Jeeun Kim](#). *Consumer-grade fabrication and its potential to revolutionize accessibility*. (2019). In Communications of the ACM 62 (CACM'19). Impact Factor: 14.06

Peer-reviewed Full Conference Proceedings

[P.33] Abul Al Arabi*, [Jeeun Kim](#). *Sibot: Fabricating Low-cost Sign Language Robots for Social Interaction*. In the Proceedings of the 2025 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'25, To appear)

- [P.32] Qianqian Shen, Yunhan Zhao, Nahyun Kwon*, [Jeeun Kim](#), Yanan Li, Shu Kong. *Solving Instance Detection from an Open-World Perspective*. In Proceedings of IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR'25, Acceptance rate: 22%, To appear)
- [P.31] Qian (Emory) Lu*, Xiaoying Yang, Xue Wang, Jacob Sanoyo, Yang Zhang, & [Jeeun Kim](#). *LumosX: 3D Printed Anisotropic Light-Transfer*. In Proceedings of the 43rd Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'25, Acceptance rate: 24% approx. To appear)
- [P.30] Osazuwa Okundaye*, Kamal Poluri, Aryabhat Darnal, Anastasia Muliana, & [Jeeun Kim](#). *3D Printed Kerf Structures*. In Proceedings of International Conference on Tangible, Embedded, and Embodied Interaction (TEI'25, Acceptance rate: 25%)
- [P.29] Nahyun Kwon*, Qian (Emory) Lu*, Joanne Lu*, Muhammad Hasham Qazi*, Shu Kong, & [Jeeun Kim](#). *AccessLens: Auto-detecting Inaccessibility of Everyday Objects*. In Proceedings of the 42nd Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'24, Acceptance rate: 26.5%)
- [P.28] Himani Deshpande*, Bo Han, Kongpyung (Justin) Moon, Andrea Bianchi, Clement Zheng, [Jeeun Kim](#). *Reconfigurable Interfaces by Shape Change and Embedded Magnets*. In Proceedings of the 42nd Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'24, Acceptance rate: 26.5%)
- [P.27] Qianqian Shen, Yunhan Zhao, Yanan Li, Nahyun Kwon*, [Jeeun Kim](#), Shu Kong. *Instance Detection via Instance Representation as NeRF*. In Proceedings of Advances in Neural Information Processing Systems. (NeurIPS'23)
- [P.26] Muhammad Hasham Qazi*, Edgar J. Rojas-Munoz, Jeeun Kim, and Farhan Khan. *Developing a VR-based Training Platform for Emergency Fire Handling Services Using Unity 3D*. In IEEE Explore, presented at 20th International Conference on Frontiers of Information Technology (FIT'23, acceptance rate: 23%).
- [P.25] Raf Ramasker, Danny Leen, [Jeeun Kim](#), Kris Luyten, Steven Houben, Tom Veuskens. *Measurement Patterns: User-Oriented Strategies for Dealing with Measurements and Dimensions in Making Processes*. In Proceedings of the 41st Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'23, Acceptance rate: 28%)
- [P.24] Justin Moon, Haeun Lee, [Jeeun Kim](#), & Andrea Bianchi. *ShrinkCells: Localized and Sequential Shape-Changing Actuation of 3D-Printed Objects via Selective Heating*. In Proceedings of the ACM Annual Symposium on User Interface Software and Technology (UIST'22, Acceptance rate: 25%)
- [P.23] Chen Liang*, Anhong Guo, & [Jeeun Kim](#). *CustomizAR: Facilitating Interactive Exploration and Measurement of 3D Customizable Adaptive Designs*. In Proceedings of ACM Conference on Designing Interactive Systems (DIS'22, Acceptance rate: 21%)
- [P.22] Abul Al Arabi*, Jiahao Li, Xiang 'Anthony' Chen, & [Jeeun Kim](#). *Mobiot: Augmenting everyday objects into moving IoT devices using 3D printed attachments*. In Proceedings of the 40th Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'22, Acceptance rate: 24.6%)
- [P.21] Jiahao Li, Alexis A Samoylov, [Jeeun Kim](#), & Xiang 'Anthony' Chen. *Roman: Making Everyday Objects Robotically Manipulable with 3D-Printable Add-on Mechanisms*. In Proceedings of the 40th Annual ACM SIGCHI Conference on Human Factors in Computing Systems. (CHI'22, Acceptance rate: 24.6%)
- [P.20] Nahyun Kwon*, Himani Deshpande*, Md Kamrul Hasan, Aryabhat Darnal*, & [Jeeun Kim](#). *Multi-ttatch: Techniques to Enhance Multi-material Attachments in Low-cost FDM 3D Printing*. In Proceedings of the 6th ACM Symposium on Computational Fabrication (SCF'21)

- [P.19] Himani Deshpande*, Haruki Takahashi & Jeeun Kim. *EscapeLoom: Fabricating New Affordances for Hand Weaving*. In Proceedings of the 39th Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'21, Acceptance rate: 26%)
- [P.18] Alexander Berman*, Joshua Howell, Ketan Thakare, Francis Quek, & Jeeun Kim. *HowDIY: Towards Meta-Design Tools to Support Anyone to 3D Print Anywhere*. In Proceedings of the 26th Annual Conference on Intelligent User Interfaces (IUI'21, Acceptance rate: 27%)
- [P.17] Jeeun Kim, James Zhou, Amanda Ghassaei, Xiang 'Anthony' Chen. *OmniSoft: A Design Tool for Soft Objects by Examples*. In Proceedings of International Conference on Tangible, Embedded, and Embodied Interaction (TEI'21, Acceptance rate: 29%)
- [P.16] Alexander Berman*, Francis Quek, Robert Woodward, Osazuwa Okundaye, Jeeun Kim. *"Anyone Can Print": Supporting Collaborations with 3D Printing Services to Empower Broader Participation in Personal Fabrication*. In Proceedings of ACM 11th Nordic Conference on Human-Computer Interaction (NordiCHI'20, Acceptance rate: 24%)
- [P.15] Haruki Takahashi, Parinya Punpongsanon & Jeeun Kim. *Programmable Filament: Printed Filaments for Multi-material 3D Printing*. In Proceedings of the ACM Annual Symposium on User Interface Software and Technology (UIST'20, Acceptance rate: 21%) **SIGCHI Best of UIST Paper Honorable Mention Award**
- [P.14] Jiahao Li, Meilin Cui, Jeeun Kim, & Xiang 'Anthony' Chen. *Romeo: A Design Tool for Embedding Transformable Parts in 3D Models to Robotically Augment Default Functionality*. In Proceedings of the ACM Annual Symposium on User Interface Software and Technology (UIST'20, Acceptance rate: 21%)
- [P.13] Jianhao Li, Jeeun Kim, & Xiang 'Anthony' Chen. *Robiot: A Design Tool for Actuating Everyday Objects with Automatically Generated 3D Printable Mechanisms*. In Proceedings of the ACM Annual Symposium on User Interface Software and Technology (UIST'19, Acceptance rate: 24%)
- [P.12] Haruki Takahashi & Jeeun Kim. *3D Printed Fabric: Techniques for Design and 3D Weaving Programmable Textiles*. In Proceedings of the ACM Annual Symposium on User Interface Software and Technology (UIST'19, Acceptance rate: 24%)
- ===== Since Joining Texas A&M =====
- [P.11] Haruki Takahashi & Jeeun Kim. *3D Pen + 3D Printer: Exploring the Role of Human and Fabrication Machine in Creative Making*. In Proceedings of the 37th Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'19, Acceptance rate: 23%)
- [P.10] Clement Zheng, Jeeun Kim, Daniel Leithinger, Mark D Gross, & Ellen Yi-Luen Do. *Mechamagnets: Designing and Fabricating Haptic and Functional Physical Inputs with Embedded Magnets*. In Proceedings of International Conference on Tangible, Embedded, and Embodied Interaction (TEI'19, Acceptance rate: 25%)
- [P.9] Jeeun Kim, Clement Zheng, Haruki Takahashi, Mark D Gross, Daniel Ashbrook, & Tom Yeh. *Compositional 3D Printing: Expanding & Supporting Workflows Towards Compositional 3D Printing*. In Proceedings of 3rd ACM Symposium on Computational Fabrication (SCF'18, Acceptance rate: 31%)
- [P.8] Jeeun Kim & Tom Yeh. *CraftML: 3D Modeling is Web Programming*, In Proceedings of the 36th Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'18, Acceptance rate: 25%)
- [P.7] Jeeun Kim, Anhong Guo, Tom Yeh, Scott E. Hudson, & Jennifer Mankoff. *Understanding Uncertainty in Measurement and Accommodating its Impact in 3D Modeling and Printing*, In Proceedings of ACM Conference on Designing Interactive Systems (DIS'17, Acceptance rate: 22%)

- [P.6] Anhong Guo, [Jeeun Kim](#), Xiang ‘Anthony’ Chen, Tom Yeh, Scott E. Hudson, Jennifer Mankoff, & Jeffrey P. Bigham *Façade: Auto-generating Tactile Interfaces to Appliances*, In Proceedings of the 35th Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI’17, Acceptance rate: 25%)
- [P.5] Hyunjooh Oh, [Jeeun Kim](#), Cory Morales, Mark D. Gross, Michael Eisenberg, & Sherry Hsi. *FoldMecha: Exploratory Design and Engineering of Mechanical Papercraft*. In Proceedings of International Conference on Tangible, Embedded, and Embodied Interaction (TEI’17, Acceptance rate: 27%)
- [P.4] Xiang ‘Anthony’ Chen, [Jeeun Kim](#), Stelian Coros, Jennifer Mankoff, & Scott E. Hudson, *Reprise: A Design Tool for Specifying, Generating, and Customizing 3D Printable Adaptations on Everyday Objects*, In Proceedings of Annual Symposium on User Interface Software and Technology (UIST’16, Acceptance rate: 21%)
- [P.3] Claudia D. Roquet, [Jeeun Kim](#), & Tom Yeh, *3D Folded PrintGami: Transforming Passive 3D Printed Objects to Interactive by Inserted Paper Origami Circuits*, In Proceedings of ACM Conference on Designing Interactive Systems, (DIS’16, Acceptance rate: 26%)
- [P.2] [Jeeun Kim](#), & Tom Yeh, *Toward 3D-Printed Movable Tactile Pictures for Children with Visual Impairments*, In Proceedings of the 33rd Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI’15, Acceptance rate: 23%)
- [P.1] Abigale Stangl, [Jeeun Kim](#), Tom Yeh, *3D Printed Tactile Picture Books for Children with Visual Impairments: A Design Probe*, In Proceedings of Conference on Interaction Design and Children (IDC’14, Acceptance rate: 30%)

Peer-reviewed Short Papers/Workshops/Extended Abstracts

- [p.24] Katherine Song, Fiona Bell, Himani Deshpande*, Ilan Mandel, Tiffany Wun, Mirela Alistar, Leah Buechley, Wendy Ju, [Jeeun Kim](#), Eric Paulos, Samar Sabie, Ron Wakkary. *Sustainable Unmaking: Designing for Biodegradation, Decay, and Disassembly*. In Proceedings of Extended Abstracts of the 42th Annual ACM Conference on Human Factors in Computing Systems (CHI’24)
- [p.23] Aryabhat Darnal, Poluri Kamal, Himani Deshpande*, [Jeeun Kim](#), Kalantar Negar, and Anastasia Muliana, *An exploration of 3D printed freeform kerf structures*. Proceedings of SPIE Smart Structures and Nondestructive Evaluation Meeting, Long Beach, CA, March 2023
- [p.22] Abul Al Arabi* & [Jeeun Kim](#). *Augmenting Everyday Physical Interfaces using Personal Fabrication*. (Siggraph Asia’22 Emerging technology)
- [p.21] Haruki Takahashi, & [Jeeun Kim](#). *Designing a Hairy Haptic Display using 3D Printed Hairs and Perforated Plates*. In Proceedings of Adjunct Annual Symposium on User Interface Software and Technology (UIST’22)
- [p.20] Himani Deshpande*, Clement Zheng, Jinsil Hawryoung Seo, Courtney Starrett, & [Jeeun Kim](#). *Hands-on Exploration of Hybrid 4D Printing Design Space* (SIGGRAPH’22 Labs)
- [p.19] Kenan Bektaş, [Jeeun Kim](#), Huaishu Peng, Kiyoshi Kiyokawa, Anthony Steed, Tobias Höllerer, Nataliya Kos’myrna, Misha Sra, Jason Orlosky, Kaan Akşit. *Telelife: A Vision of Remote Living in 2035*. In Proceedings of Extended Abstracts of the 40th Annual ACM Conference on Human Factors in Computing Systems (CHI’22)
- [p.18] Qian Lu*, Aryabhat Darnal, Haruki Takahashi, Anastasia Muliana, & [Jeeun Kim](#). *User-Centered Property Adjustment with Programmable Filament*. In Proceedings of Extended Abstracts of the 40th Annual ACM Conference on Human Factors in Computing Systems (CHI’22)

[p.17] Himani Deshpande*, Clement Zheng, Courtney Starrett, Jinsil Hawryoung Seo, & Jeeun Kim. *Fab4D: An Accessible Hybrid Approach for Programmable Shaping and Shape-Changing Artifacts*. In Proceedings of 16th International Conference on Tangible, Embedded, and Embodied Interaction (TEI'22)

[p.16] Nahyun Kwon*, Chen Liang*, & Jeeun Kim. *3D4ALL: Toward an Inclusive Pipeline to Classify 3D Contents*. In Proceedings of Transparency and Explanations in Smart Systems (TESS'21)

[p.15] Aryabhat Darnal*, Zaryab Shahid, Himani Deshpande*, Jeeun Kim, & Anastasia Muliana. *An Investigation on the Mechanical Properties of a 3D Printed TPU/PLA Programmable Filament*. 7th International Conference on Mechanics of Composites (MechComp7)

[p.14] Andrew J Mertens, Mary Roszel, Jeeun Kim, Tom Yeh, & Eliana Colunga. *Parent-Child Interactions and Word Learning: Introducing vocabulary in different play contexts*. The 41st Annual Meeting of the Cognitive Science Society (CogSci'19)

===== Since Joining Texas A&M =====

[p.13] Jeeun Kim, Haruki Takahashi, Homey Miyashita, Michelle Annett, & Tom Yeh. *Machines as Co-Designers: A Fiction on the Future of Human-Fabrication Machine Interaction*, (alt.chi) In Proceedings of Extended Abstracts of the 35th Annual ACM SIGCHI Conference on Human Factors in Computing Systems (CHI'17)

[p.12] Jeeun Kim. *Shall We Fabricate? Collaborative, Bidirectional, Incremental Fabrication*, In Proceedings of Adjunct Annual Symposium on User Interface Software and Technology (UIST'17), Quebec, Canada

[p.11] Jeeun Kim, Abigale Stangl, & Tom Yeh. *Learning Underlying Principles of Physicalization by Tangible, Embodied, and Iterative Fabrication*, Presented at Pedagogy and Physicalization: Designing Learning Activities around Physical Data Representations Workshop on DIS'17, Edinburgh, UK

[p.10] Jeeun Kim. *Co-Designer Robot: Envisioning Human-Fabrication Machine Interaction (HFI)* – Presented at What Actors can Teach Robots Workshop on CHI'17, Denver, CO

[p.9] Anhong Guo, Jeeun Kim, Xiang 'Anthony' Chen, Tom Yeh, Scott E. Hudson, Jennifer Mankoff, & Jeffrey P. Bigham. *Façade: Auto-generating Tactile Interfaces to Appliances*, In Proceedings of 18th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS'16)

[p.8] Jeeun Kim, Swamy Ananthanarayan. & Tom Yeh, *Seen Music: Ambient Music Data Visualization for Children with Hearing Impairments*, In Proceedings of the Interaction Design and Children (IDC'15)

[p.7] Jeeun Kim, Hyunjoo Oh, & Tom Yeh, *A Study to Empower Children to Design Movable Tactile Pictures for Children with Visual Impairments*, In Proceedings of International Conference on Tangible, Embedded, and Embodied Interaction (TEI'15)

[p.6] Jeeun Kim, Abigale Stangl, & Tom Yeh, *Using LEGO to Model 3D Tactile Picture Books by Sighted Children for Blind Children*, In Proceedings of ACM symposium on Spatial user interaction (SUI'14)

[p.5] Jeeun Kim, Michael Kasper, Tom Yeh, & Nikolas Correll, *SikuliBot: Automating Physical User Interface Using Images*, In Proceedings of Adjunct Annual Symposium on User Interface Software and Technology (UIST'14)

[p.4] Abigale Stangl, Jeeun Kim, & Tom Yeh, *Technology to Support Emergent Literacy Skills in Young Children with Visual Impairments*, In Proceedings of Extended Abstracts of the 32nd Annual ACM Conference on Human Factors in Computing Systems (CHI'14)

[p.3] Jeeun Kim, Abigale Stangl, Ann Eisenberg, & Tom Yeh, *Evaluating Tactile User Experience with Tactile Picture Books for Children with Visual Impairment* – Presented at "Touch Me", Tactile Evaluation Methods Workshop on CHI'14

[p.2] Jeeun Kim, Abigale Stangl, Ann Eisenberg, & Tom Yeh, *Tactile Picture Books for Young Children with Visual Impairment*, International Conference on Tangible, Embedded, and Embodied Interaction (TEI'14)

[p.1] Jeeun Kim, Abigale Stangl, Ann Eisenberg, & Tom Yeh, *Printing Tactile Picture Books for Blind Children*, ACM Grace Hopper Celebration 2013 (GHC'13)

Non-refereed Papers (Selected Conference Presentations by Abstract Submission)

[N.2] Aryabhat Darnal, Kamal Poluri, Osazuwa Okundaye, Jeeun Kim, Negar Kalantar, Anastasia Muliana. *Multi-Dimensional and Multi-Scale Shape Configurations Using Chiral Kerf Structures*. ASME 2024 Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS2024).

[N.1] Aryabhat Darnal, Jeeun Kim, Kalantar Negar, and Anastasia Muliana. *Tuning Mechanical Response of Hierarchical Composite Structures*. The American Society for Composites (ASC) Annual Meeting 2023. Boston, MA

Patents

[2] Jeeun Kim, Chae Eun Oh, Hyejung Kim, *Method and system for distributing business application and content for mobile equipment using application store and wireless AP*, Patents, United States Patent and Trademark Office, USA (US Patent 9,092,812)

[1] Jeeun Kim, Chae Eun Oh, Hyejung Kim, *Method and system for distributing business application and content for mobile equipment using application store and wireless AP*, Patents, Korea Patent and Trademark Office, Korea

Other Publications (Pre-prints/Archived/Under submission)

[1] Chen Liang*, Nahyun Kwon*, & Jeeun Kim. *Creative Compensation (CC): Future of Jobs with Creative Works in 3D Printing*. (arXiv preprint arXiv:2111.04840)

[*] Abul Al Arabi*, Jeeun Kim. Vib3D: Fabricating Miniature Self-Powered Vibration Sensors at Scale.

[*] Himani Deshpande*, Nahyun Kwon*, Prajwal Iyer*, Jeeun Kim. LumiPrint: Enhancing Visual Capabilities of Passive 3D Objects for Dim Environments. (under review)

[*] Emory Lu*, Himani Deshpande*, Madelein Villegas*, Jeeun Kim. Programmable Acoustic Transfer.

[*] Xiaoying Yang, Emory Lu*, Yang Zhang, Jeeun Kim. Self-powered Piezo by User Interaction.

[*] Liuyi Jin, Pasan Gunawardena, Arman Harron, Ruzhi Wang, Sangwoo Lee, Radu Stoleru, Michael Middleton, Frazier Zepeng Huo, Jeeun Kim, Jason Moats. EMSGlass: A Multimodal Foundation Model-enabled Networked Smart Glasses System for Emergency Medical Service. (Under review)

Grants & Funding

External (Total = \$3.7M, directed to the PI = \$1.3M)

[G.13] **CAREER: Augmenting Passive Physical Interfaces into Adaptive Interfaces** [+ REU supplements]

Role: Sole-PI, \$600K (2024 – 2029)

National Science Foundation, IIS-2340120

[G.12] *NRI: Human-Robot Interface for Extraterrestrial Construction*

Role: Co-PI, \$900K (2023 – 2026, Personal Share: \$113K), PI: Youngjib Ham (Construction Science), Other Co-PIs: Thomas Ferris (Industrial & Systems Engineering), Gregory Chamitoff (Aerospace Engineering)
National Science Foundation, CMMI-2221436

[G.11] *FW-HTF-RM: The Future of Teleoperation in Construction Workplaces*

Role: Co-PI, \$1.4M (2023 – 2024, Personal Share: \$160K), PI: Youngjib Ham (Construction Science), Other Co-PIs: S. Camille Peres (Environmental & Occupational Health), Thomas Ferris (Industrial & Systems Engineering), Mindy Bergman (Psychology)
National Science Foundation, CMMI-2026574

[G.10] *HCC: Small: Collaborative Research: 3D Printing Visual Capabilities using Light Transfer*

Role: PI, \$600K (2022 – 2025), Co-PI: Yang Zhang (UCLA)
National Science Foundation, IIS-2213842

[G.9] *FW-HTF-P: Upskilling Craftspeople to Prepare for the Future of End-user Driven Manufacturing*

Role: PI, \$150K (2022 – 2024) Co-PIs: Anastasia Muliana (Mechanical Engineering), Courtney Starrett (Visualization & Fine Arts), Rebecca Schlegel (Psychology)
National Science Foundation, CMMI-2222935

[G.8] *Ralph E. Powe Junior Faculty Enhancement Award*

Role: Sole-PI, \$10,000 (2021–2022)
Oak Ridge Associated Universities (ORAU)

[G.7] *Adobe Unrestricted Gift*

Role: Sole-PI, \$2,500 (2019–2021)
Adobe Inc.

Internal (Total = \$118K)

[G.6] TEES Young Faculty Fellow

Role: Sole-PI, \$2,000
College of Engineering, Texas A&M University

[G.5] Montague-Center for Teaching Excellence Scholar

Role: Sole-PI, \$6,500
Center for Teaching Excellence, Texas A&M University

[G.4] *Increasing Audience Engagement and Interactions during Immersive Performances via Augmented Reality*

Role: Co-PI, \$7,500
AVPA Arts Research Grant

[G.3] *Multi-user, Accessible Multi-Sensory Augmented Reality Experiences, and Workshops to Increase Engagement and Interactions during Immersive Performances*

Role: Co-PI, \$15,000
PVFA Interdisciplinary Collaboration Grant.

[G.2] *VIVID Lab: Visceral Intersensory Visualization & Information Design*

Role: Co-PI, \$55,000 + full salary for a lab postdoc
Texas A&M Institute of Data Science (TAMIDS)

[G.1] *Producing New Material Properties By Low-Cost 3D Printing Techniques*

Role: PI, \$32,000

Advising & Mentoring

Ph.D. Students

2025-present, Muhammad Hasham (CS, Chair)
2023-present, Qian (Emory) Liu (CS, Chair)
2023-present, Rosendo Narvaez (CS)
2023-present, Md Maklachur Rahman (CS)
2023-present, Osazuwa Okundaye (Architecture)
2021-present, Abul Al Arabi (CS, Chair)
2020-present, Nahyun Kwon (CS, Chair)
2020-present, Himani Deshpande (CS, Chair)
2022-2024, Aryabhat Darnal (ME)
2021-2023, Di Liu (Construction Science)
2019-2021, Alex Berman (CS)

M.S. Students

2023-present, Yeon Chae (CS, chair)
2024,
2023-2024, Cameron Klepac (Architecture)
2022, Prajwal Iyer (CS)
2022, Lois Julian (CS, chair)
2021, Arman Rezaee (CE, chair)
2019-2021, Chen Liang (CS, chair), **Excellence in Research Award**
2020, Elaine Yi-Lien Liang (ETID)

Undergraduate Students

2023-present, Joanne Liu (CS)
2024, David-Tyler Ighedosa (CS)
2023-2024, Harshitha Dhulipala (CS, Honors Thesis chair)
2023-2024, Saikavya Sree Kotra (CS, Honors Thesis chair)
2023-2024, Anjali Kumar (CS, Honors Thesis chair)
2023-2024, Aarthi Srinivasan (CS, Honors Thesis chair)
2023-2024, Ashirita Vadlapatla (CS, Honors Thesis chair)
2022-2024, Muhammad Hasham (Halliburton Engineering Global Intern)
2021, Prajwal Iyer (CS)
2021, Harsha Siripurapu (CS)
2021, Zhengnan Huang (CS)
2020-2021, Rush Hoelscher (CS, Honors Thesis chair)

Teaching

2025-present, Human-Centered Computing (CSCE 655)
2020-present, Computer-Human Interaction (CSCE 436)
2020-present, Digital Fabrication Studio (CSCE 743, Course Creator)
2019-present, Human-centered Seminar (CSCE 667)

Professional Service

Program Chair & Program Committee

2025, ACM UIST | General chair
2018-present, ACM CHI | Program Committee
2020-present, ACM UIST | Program Committee
2024-2025, ACM CHI | Subcommittee chair (Novel Devices: Hardware, Materials, and Fabrication)
2019-2024, ACM UIST | Doctoral Consortium program chair (2024), Posters program Co-chair (2021-2022), Registrations Co-chair (2019-2020)
2022, ACM SIGGRAPH Asia | Program Committee
2021, ACM IUI | Short papers program chair
2021, ACM EICS | Program Committee
2020-2021, ACM SCF | Posters program chair (2020), Area chair (HCI, 2021)

Journal Paper Review & Editorial Board

2023-present, Foundations and Trends in HCI, Editorial Board
2023-present, Frontiers in Virtual Reality, Editorial Board
2023, ACM Transactions on Human-Computer Interaction (ToCHI)
2021, International Journal of Design (IJDesign)
2021, Sustainability, MDPI
2019, Universal Access in the Information Society (UAIS), Springer
2018, ACM Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
2018, ACM Transactions on Accessible Computing (TACCESS)
2015, Research in Developmental Disabilities, Elsevier

Award Review Panel

2024, DoD NDSEG Fellowship
2024, NSF CISE Directorate
2023, NSF TIPP Directorate
2022, NSF CISE Directorate (x2)
(Internal) 2021, Texas A&M University Office of Provost, X-grant program

Conference Paper Review

NeurIPS (2023-2024) | Benchmark and Dataset Track, ACM UIST (2013- Present) | Papers, ACM CHI (2014-Present) | Papers, Late Breaking Works, Art Exhibition, ACM TEI (2014-Present) | Papers & Pictorials, ACM SCF (2018-Present) | Papers & Posters, ACM DIS (2014- Present) | Papers, Pictorials, Provocations and Works-in-Progress, ACM CSCW (2015-Present) | Papers, Posters, ACM Eurographics 2023 | Technical papers, ACM VRST (2021) | Papers, ACM SIGGRAPH (2020) | Technical Papers
Others: C&C (2015/2017), IDC (2014-2017), SUI (2014), CHI Play (2014-2016), Mobile HCI (2014-2016), TVX (2014-2016), ISS (Formally ITS, 2014)

Internal Service

Department Advisory Committee (Peer elected position) | CSE (2021-2022, 2023-present)
T/TT Faculty Search Committee | CSE (2022-2023)
Broadening Participation in Computing Committee | CSE (2022-2023)
Visualization Department Joint Committee | CSE, (2021-2022)
Ph.D. Program Admission Committee | CSE (2019-2020, 2020-2021)

Invited Talks

2024, Smart Agriculture Workshop, USDA NIFA & J. Mike Walker '66 Mechanical Engineering at A&M
2024, EECS Rising Stars, Electrical Engineering and Computer Science, MIT
2023, Electronics and Telecommunications Research Institute (ETRI), Korea (Virtual, Host: Kihong Kim)
2021, DEMAND Workshop (Virtual, Host: Jian Cao, Northwestern University)
2021, Texas A&M VIVID Lab Preliminary Workshop (Virtual, Host: Ann McNamara)
2021, Digital Fabrication at Korea HCI'21 (Virtual, Host: Andrea Bianchi)
2020, Tactual Labs Toronto (Virtual, Host: David Holman)
2020, University of California Berkeley, Jacobs Institute for Design (Canceled due to COVID)
2019, KAIST, HCI@KAIST (School of Computing & Industrial Design), Korea (Host: Juho Kim)
2019, KAIST, Electrical Engineering, Korea (Host: KyoungSoo Park)
2019, Ewha Womans University, Computer Science & Engineering, Korea (Host: Uran Oh)
2019, Cornell University, Information Science (Host: Francois Guimbretiere)
2019, University of Illinois at Chicago, Computer Science (Host: Chris Kanich)
2019, George Mason University, Computer Science (Host: Yotam Gingold)

2019, University of Colorado Boulder, Institute of Cognitive Science, Language Group, (Host: Eliana Colunga)
 2019, University of Victoria, Computer Science, Victoria, Canada (Host: Kwangmoo Yi)
 2018, Adobe, Fabrication Strategy Group Meeting, San Francisco, CA (Host: Wilmot Li)
 2018, Adobe, Creative Intelligence Lab, San Francisco, CA (Host: Qingnan James Zhou)
 2018, HP, Immersive Experiences Lab, Palo Alto, CA (Host: Tico Ballagas)
 2018, Seoul National University, Dept. of Communication, Korea (Host: Hwajung Hong)
 2017, Ericsson Research, Media Technology Group, Santa Clara, CA (Host: Alvin Jude Hari Haran)
 2015, National Teen's Science Cafe, Denver, CO (Host: Stacey Forsyth)

Invited Exhibitions

2018, Smithsonian Design Museum (Cooper Hewitt), New York, As part of *"Design for the Senses: Beyond Visual"*
 2017, King Abdulaziz Center for World Culture, Saudi Arabia, *"World Culture Exhibition"* (Permanent)
 2016, Lyons Public Library, Colorado, *"Crowd Sourced 3D Printed Tactile Pictures – Harold and the Purple Crayon"*
 2015, Future of Storytelling Design Summit, New York, Part of *"Reinventing the Way Stories Are Told"*
 2015, Gemmille Engineering Library, CO, *"Crowdsourced 3D Printed Tactile Pictures"*

Broadening Participation in Computing (BPC)

2024, Annual CS Day (Demo)
 2022-present, AWiCS (Aggie Women in Computer Science), Faculty Advisor
 2020-present, TxHCI Seminar Series, Founding faculty member & organizer <https://txhci.uta.edu/>
 2023, Annual CS Day Founding Faculty member <https://www.csday.org/> ([news article](#))
 2022, Aggie STEM camp, Faculty host
 2022, Summer Computing Academy, A&M High-performance Research Center, Faculty host
 2021, Engineering Excellence Enrichment (E3) program (Faculty host with Dr. Shinjiro Sueda)
 2021, Spark! Summer camp for K-12 Students, Faculty host
 2021, UT Southwest STAR workshop for prospective Biomedical Engineers, Guest lecture
 2019, CU Science Discovery, Workshop, *"Build Better Books (BBB)"*
 2017, ATLAS Research Showcase, Demo *"Kinemaker: Supporting Mechanical Design by Remixing 3D Gearboxes"*
 2015, Denver Public Library, 2 weeks Workshops at Family IdeaLAB, *"Programming 3D Pictures"*
 2015, CU Science Discovery, 2 weeks Summer Camp *"Designing 3D Pictures by Web Programming"*
 2014-2015, CU Science Discovery, Guest lecture for high school students, *"Creating Tangible Media"*
 2015, Colorado Computer Science Education Week, Demo, *"Emergent Technologies: 3D Printing in Classroom"*
 2015, IdeaForge, Colorado, Demo, *"Tactile Picture Books for Children with Visual Impairments"*
 2014, Colorado Talking Book Library, Workshop *"Design Tactile Map to Guide People with Visual Impairments"*
 2014, Teen's Science Cafe, Colorado, Workshop *"Designing Tactile Pictures for 3D Printing"*

Press & Media (Since joining A&M)

2023, 3Dprint.com, 3D Printed Energy Harvesters Could Make Your Home More Sustainable ([link](#))
 2023, Hackster.io, The Shocking Potential of Energy Harvesters ([link](#))
 2023, 3Dprinting.com, The E3D Toolkit: Customizing 3D Printed Energy Harvesters ([link](#))
 2022, Arduino Press, Mobyot is a system that lets anyone automate everyday objects ([link](#))
 2021, Texas A&M Engineering, High school students look for the next big idea in engineering ([link](#))
 2020, IEEE Spectrum & ACM Tech News, Programmable Filament Gives Even Simple 3D Printers Multi-Material Capabilities ([link](#))
 2020, New ATLAS, New filament tech lets regular 3D printers build multi-material items ([link](#))
 2020, 3D Print.com, Programmable Filament: Multicolor & Multimaterial 3D Printing with No Hardware Upgrade ([link](#))
 2020, Hackster.io, Robiot is a Design Tool That Generates Mechanisms to Motorize Everyday Objects ([link](#))

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