

# Sang Won Lee

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## Areas of specialization

Human Computer Interaction (HCI), Computer Supported Cooperative Work and Social Computing (CSCW), Computer Music, Human Computation and Crowdsourcing

## Education

- 2018 PHD in Computer Science, University of Michigan, Ann Arbor, MI  
Dissertation : Improving User Involvement Through Live, Collaborative Creation
- 2014 MASTER in Computer Science, University of Michigan, Ann Arbor, MI
- 2012 MASTER in Music Technology, Georgia Tech, Atlanta, GA  
Thesis : Audience participation using mobile phones as musical instruments
- 2010 MASTER in Management Science and Engineering, Stanford University, Stanford, CA
- 2007 BACHELOR in Industrial Engineering, Seoul National University, Seoul, South Korea

## Honors & awards

- Dec. 2022 Received **Best Poster Award**, at ACM SUI 2022 for paper “Integrating Traditional Input Devices to Support Rapid Ideation in an Augmented-reality-based Brainstorming”.
- May. 2022 Received **Best Paper Honorable Mention Award**, at ACM CHI 2022 for paper “OtherTube: Facilitating Content Discovery and Reflection By Exchanging YouTube Recommendations With Strangers”.
- Sep. 2020 Received **Best Short Paper**, at VL/HCC 2020 for paper “EdCode: Towards Personalized Support at Scale for Remote Assistance in CS Education” .
- Feb. 2017 Received **Rackham Pre-doctoral Fellowship**, University of Michigan. Fellowships include a

stipend of \$32,640, candidacy tuition and registration fees for twelve months.

- Dec. 2016 Selected as a finalist of Adobe Research Fellowship (2017).
- Nov. 2016 Selected as a finalist of Annual CSE Graduate Honors Competition, Computer Science and Engineering, University of Michigan, Ann Arbor, MI.
- Sep. 2016 *Live Writing: Gloomy Streets* Received **ICMA Music Award** (student) at the International Computer Music Conference (over 600 submissions)
- Feb. 2015 *Aural Cavity* selected as a semi-finalist in Guthman Musical Instrument Competition 2015.
- May 2013 *Improvisation on a live-coded mobile musical instrument using urMus* Received the 3rd prize in Live Programming Demo Contest in International Conference on Software Engineering (**ICSE**) 2013
- Sep. 2012 Received **CSE Fellowship**, University of Michigan. Fellowships include monthly stipend, tuition and registration fees for twelve months. (\$71,854)
- Nov. 2011 *LOLC* performance awarded **Best Artwork** in ACM Creativity and Cognition Conference 2011
- Nov. 2011 *Crossole* chosen as a finalist in Georgia Tech Research and Innovation Conference (GTRIC).


### Advisees' Awards

- May. 2023 Teresa Thomas won **the David Heilman Research Award** from the Department of Computer Science at Virginia Tech.
- Apr. 2023 Md Momen Bhuiyan won 3rd place in **the Paul E. Torgersen Research Excellence Award** from the College of Engineering at Virginia Tech.
- Mar. 2022 Molly Hickman received **the Outstanding Thesis Award** from the Graduate School at Virginia Tech.

## Conference Publications

*Note about conference papers: in Human-Computer Interaction and Computer Music, conference proceedings are the preferred publication venues. Top-tier conferences such as CHI, UIST, CSCW, and NIME are selective (approximately 25% acceptance rate for oral presentation). Authors that are my advisees are underlined. \* indicates equal contribution.*

- [P.45] Hu, D., Lee, S. W., "Exploring the Effectiveness of Time-lapse Screen Recording for Self-Reflection in Work Context", In Proceedings of the ACM Conference on Human Factors in Computing Systems (**CHI**), pp. 1-21, 2024. [26.3% Acceptance Rate]
- [P.44] Isaza, C. A. B., Enriquez, D., Moon, H., Jeon, M., Lee, S. W.. "Understanding Multi-user, Mobile-Based Mixed Reality for Group-based MR game.", In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (**CSCW**), pp.1-28, Costa Rica, 2024.
- [P.43] Wang, B., Bhuiyan, Md M., Rho, E. H., Luther, K., Lee, S. W.. "Understanding the Relationship Between Social Identity and Self-Expression Through Animated Gifs on Social Media.", In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (**CSCW**), pp.1-31, Costa Rica, 2024.

- [P.42] Manesh, D., Luu, A., Khalid, M., Li, J., Okonkwo, C., Akanmu, A., Awolusi, I., Murzi, H., **Lee, S. W.**, “Octave: an End-User Programming Environment for Analysis of Spatiotemporal Data for Construction Students”, pp. 1-9, IEEE Symposium on Visual Languages and Human-centric Computing (VL/HCC), Washington D.C. 2023.
- [P.41] Park, S. Y., Lee, S. W., “Why “why”? The Importance of Communicating Rationales for Edits in Collaborative Writing”, In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), pp. 1-25, Hamburg, Germany, 2023. [28.4% Acceptance Rate]
- [P.40] Bhuiyan, Md M., Lee, S. W., Goyal, N., Mitra T., “NewsComp: Facilitating Diverse News Reading through Comparative Annotation”, In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), pp. 1-17, Hamburg, Germany, 2023. [28.4% Acceptance Rate]
- [P.39] Li, Y., **Lee, S. W.**, Bowman, D. A., Hicks, D., Lages, W. S., Sharma, A., “ARCritique: Supporting Remote Design Critique of Physical Artifacts through Collaborative Augmented Reality”, In Proceedings of the ACM Symposium on Spatial User Interaction (SUI), pp. 1-12, Virtual. 2022.
- [P.38] Hu, D., Lee, S. W., “Scrapbook: Screenshot-Based Bookmarks for Effective Digital Resource Curation across Applications”, In Proceedings of the ACM Symposium on User Interface Science and Technology (UIST), pp. 1-13, Bend, Oregon. 2022. [25.9% Acceptance Rate]
- [P.37] Carrera, D., Lee, S. W. “Watch Me Write: Exploring the Effects of Revealing Creative Writing Process through Writing Replay”, In Proceedings of the ACM Conference on Creativity & Cognition (C&C), pp. 146-160, Venice, Italy, 2022. [23.4% Acceptance Rate]
- [P.36]  Bhuiyan, Md M., Isaza, C. A. B., Mitra T., **Lee, S. W.** “OtherTube: Facilitating Content Discovery and Reflection By Exchanging YouTube Recommendations With Strangers”, In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), pp. 1-17, New Orleans, 2022. [12.5% Minor Revision Acceptance Rate] **Best Paper Honorable Mention Award**
- [P.35] Bhuiyan, Md M., Horning, M., **Lee, S. W.**, Mitra T. “Designing Transparency Cues in Online News Platforms to Promote Trust: Journalists’ & Consumers’ Perspectives”, In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), pp.1-31, virtual, 2021.
- [P.34] Bhuiyan, Md M., Whitley, H., Horning, M., **Lee, S. W.**, Mitra T., “NudgeCred: Supporting News Credibility Assessment on Social Media Through Nudges”, In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), pp.1-30, virtual, 2021.
- [P.33] Movassagh, M. R., Roofigari-Esfahan, N., **Lee, S. W.**, Evia, C., Hicks, D., Jeon, M., “Human Factors Considerations for Teaming between Construction Workers and Voice-based Intelligent Virtual Agent (VIVA)”, the International Annual Meeting of the Human Factors and Ergonomics Society (HFES), pp. 72-76, Baltimore, MD, 2021.
- [P.32] Hickman, M., Pasad, V., Sanghavi, H., Thebault-Spieker, J., **Lee, S. W.** “Understanding Wikipedia practices through Hindi, Urdu, and English Takes on an Evolving Regional Conflict”, In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), pp.1-31, virtual, 2021.
- [P.31] Park, S. Y., Lee, S. W. “Lost in Co-curation: Uncomfortable Interactions and the Role of Communication in Collaborative Music Playlists”, In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), pp.1-24, virtual, 2021.
- [P.30] Chen, Y., **Lee, S. W.**, Oney, S. “CoCapture: Effectively Communicating UI Behaviors on Existing Websites by Demonstrating and Remixing”, In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI), pp 1-14, virtual, 2021.

- [P.29] Grudinschi, M., Norland, K., **Lee, S. W.**, Lim, S. “Task Analysis on Yoga Poses Toward a Wearable Sensor-based Learning System for Users with Visual Impairment” the International Annual Meeting of the Human Factors and Ergonomics Society (**HFES**), pp. 634-638, Chicago, IL, 2020.
- [P.28]  Chen, Y., Herskovitz, J., Matute, G., Wang, A., **Lee, S. W.**, Lasecki, W. S., Oney, S. “EdCode: Towards Personalized Support at Scale for Remote Assistance in CS Education”, pp. 1-5, IEEE Symposium on Visual Languages and Human-centric Computing (**VL/HCC**), Dunedin, New Zealand. 2020. **Best Short Paper Award**
- [P.27] Hu, D., **Lee, S. W.**, “ScreenTrack: Using a Visual History of a Computer Screen to Retrieve Documents and Web Pages”, In Proceedings of the ACM Conference on Human Factors in Computing Systems (**CHI**), pp. 1-13, 2020. [24.3% Acceptance Rate]
- [P.26] **Lee, S. W.**, Willette, A., Koutra, D., Lasecki, W.S. “The Effect of Social Interaction on Facilitating Audience Participation in a Live Music Performance”, In Proceedings of the ACM Conference on Creativity & Cognition (**C&C**), pp. 108-120, San Diego, CA, 2019. [29.7% Acceptance Rate]
- [P.25] **Lee, S. W.**, “Show Them My Screen: Mirroring a Laptop Screen as an Expressive and Communicative Means in Computer Music”, In Proceedings of the International Conference on New interface for Musical Expression (**NIME**), pp. 443-448, Porto Alegre, Brazil, 2019.
- [P.24] **Lee, S. W.**, Krosnick, Park, S. Y., R., Keelean, B., Vaidya, S., O’Keefe, S. D., Lasecki, W.S. “Exploring Real-time Collaboration in Crowd-Powered Systems Through a UI Design Tool”, In Proceedings of the International ACM Conference on Computer Supported Cooperative Work and Social Computing (**CSCW**), pp.1-23, New York, NY. 2018 [25.6% Acceptance Rate]
- [P.23] Krosnik, R., **Lee, S. W.**, Lasecki, W., Oney, S. “Espresso: Building Responsive Interfaces with Keyframes”, IEEE Symposium on Visual Languages and Human-centric Computing (**VL/HCC**), pp. 39-47, Lisbon, Portugal. 2018. [29% Acceptance Rate]
- [P.22] **Lee, S. W.**, Zhang, Y., Wong, I., Yang Y., O’Keefe, S., Lasecki, W.S. “SketchExpress: Remixing Animations For More Effective Crowd-Powered Prototyping Of Interactive Interfaces”, In Proceedings of the ACM Symposium on User Interface Science and Technology (**UIST**), pp. 817-828, Quebec City, Canada. 2017. [22.5% Acceptance Rate]
- [P.21] Essl, G., **Lee, S. W.**, “Mobile Devices as Musical Instruments - State of the Art and Future Prospects”, In Proceedings of the International Symposium on Computer Music Multidisciplinary Research (**CMMR**), pp. 525-539, Matosinhos, Porto, Portugal, 2017.
- [P.20] **Lee, S. W.**, Bang, J., Essl, G., “Live Coding YouTube: Organizing Streaming Media for an Audio-visual Performance”, In Proceedings of the International Conference on New interface for Musical Expression (**NIME**), pp. 261-266, Copenhagen, Denmark, 2017. [24% Acceptance Rate]
- [P.19] Chen, Y., **Lee, S. W.**, Xie, Y., Yang, Y., Lasecki, W., Oney, S. “Codeon: On-Demand Software Development Assistance” In Proceedings of the ACM Conference on Human Factors in Computing Systems (**CHI**), pp. 6220-6231, Denver, CO, 2017. [25% Acceptance Rate]
- [P.18] **Lee, S. W.**, Scott, J. “Word Level Lyrics-Audio Synchronization Using Separated Vocals”, International Conference on Acoustics, Speech and Signal Processing (**ICASSP**), pp. 646-650, New Orleans, 2017.
- [P.17] **Lee, S. W.**, Essl, G. “Live Coding the Audience Participation” In Proceedings of the International Conference on Live Coding (**ICLC**), pp. 1-8, Hamilton, Canada, 2016.
- [P.16] Blackwell, A. F., Cox, G., **Lee, S. W.** “Live Writing the Live Coding Book” In Proceedings of the International Conference on Live Coding (**ICLC**), pp. 1-12, Hamilton, Canada, 2016.
- [P.15] **Lee, S. W.**, Essl, G., Martinez, M., “Live Writing: Writing as a Real-time Audiovisual Performance” In Proceedings of the International Conference on New interface for Musical Expression (**NIME**),

pp. 212-217, Brisbane, Australia, 2016.

- [P.14] Carvalho, A. D., **Lee, S. W.**, Essl, G. “Understanding Cloud Support in the Audience Participation Music Performance of Crowd in C[loud]” In Proceedings of the International Conference on New Interface for Musical Expression (**NIME**), pp. 176-181, Brisbane, Australia, 2016.
- [P.13] **Lee, S. W.**, Carvalho, A. D., Essl, G. “Crowd in C[loud]: Audience Participation Music with Online Dating Metaphor using Cloud Service” In Proceedings of the Web Audio Conference (**WAC**), pp. 1-6, Atlanta, Georgia, 2016.
- [P.12] **Lee, S. W.**, Essl, G. “Live Writing: Asynchronous Playback of Live Coding and Writing” In Proceedings of the International Conference on Live Coding (**ICLC**), pp. 1-9, Leeds, United Kingdom, 2015.
- [P.11] Carvalho, A. D., **Lee, S. W.**, Essl, G. “SuperCopair: Collaborative Live Coding on Supercollider through the cloud” In Proceedings of the International Conference on Live Coding (**ICLC**), pp. 1-7, Leeds, United Kingdom, 2015.
- [P.10] **Lee, S. W.**, Essl, G. “Web-Based Temporal Typography for Musical Expression and Performance” In Proceedings of the New Instruments for Musical Expression (**NIME**), pp. 65–69, Baton Rouge, United States, 2015.
- [P.9] **Lee, S. W.**, Essl, G. “Models and Opportunities for Networked Live Coding” In Proceedings of The Live Coding and Collaboration symposium 2014, pp. 1-5, Birmingham, United Kingdom, 2014.
- [P.8] **Lee, S. W.**, Essl, G. “Communication, Control, and State Sharing in Networked Collaborative Live Coding” In Proceedings of the New Instruments for Musical Expression (**NIME**), pp. 263–268, London, United Kingdom, 2014. [25% Acceptance Rate]
- [P.7] **Lee, S. W.**, Essl, G., Mao, Z. M. “Distributing Mobile Music Applications for Audience Participation Using Mobile Ad-hoc Network (MANET)” In Proceedings of the New Instruments for Musical Expression (**NIME**), pp. 533–536, London, United Kingdom, 2014.
- [P.6] **Lee, S. W.**, Essl, G. “Live Coding The Mobile Music Instrument” In Proceedings of the International Conference on New Instruments for Musical Expression (**NIME**), pp. 493–498., Daejon-Seoul, South Korea, 2013.
- [P.5] **Lee, S. W.**, Freeman, J. “echobo: a Mobile Music Instrument Designed for Audience To Play” In Proceedings of the International Conference on New Instruments for Musical Expression (**NIME**), pp. 450–455, Daejon-Seoul, South Korea, 2013.
- [P.4] **Lee, S. W.**, Freeman, J., Collela, A. “Real-Time Music Notation, Collaborative Improvisation, and Laptop Ensembles” In Proceedings of the International Conference on New Instruments for Musical Expression (**NIME**), pp. 1-4, Ann Arbor, MI. 2012.
- [P.3] **Lee, S. W.**, Srinivasamurthy, A., Tronel, G., Shen, W., Freeman, J. “Tok!: A Collaborative Acoustic Instrument using Mobile Phones”, In Proceedings of the International Conference on New Instruments for Musical Expression (**NIME**), pp. 1-4, Ann Arbor, MI. 2012.
- [P.2] Şentürk, S., **Lee, S. W.**, Sastry, A., Daruwalla, A., Weinberg, G. “Crossole: a Gestural Interface for Composition, Improvisation and Performance using Kinect”, In Proceedings of the International Conference on New Instruments for Musical Expression (**NIME**), pp. 1-4, Ann Arbor, MI. 2012.
- [P.1] **Lee, S. W.**, Freeman, J., Collela, A., Troyer, A. and Yao, S. “Evaluating Collaborative Laptop Improvisation with LOLC” In Proceedings of the Symposium on Laptop Ensembles and Orchestras (**SLEO**), pp. 55-62, Louisiana State University, LA, 2012.

## Journal Articles

- [J.8] Khalid, M., Akanmu A., Murzi, H., **Lee, S. W.**, Awolusi, I., Manesh, D., Okonkwo, C. “Industry Perception of the Knowledge and Skills Required to Implement Sensor Data Analytics in Construction”, *Journal of Civil Engineering Education* pp.1-15, 2024
- [J.7] Islam M.S. **Lee, S. W.**, Harden, S. M., Lim, S. “Effects of vibrotactile feedback on yoga practice”, *Frontiers in Sports and Active Living*, pp.1-21, 2022
- [J.6] Li, Y., Hu, D., Wang, B., Bowman, D. A., **Lee, S. W.**, “The Effects of Incorrect Occlusion Cues on the Understanding of Barehanded Referencing in Collaborative Augmented Reality”, *Frontiers in Virtual Reality | Augmented Reality*, pp. 1-16, 2021
- [J.5] Essl, G., **Lee, S. W.**, “Mobile Devices as Musical Instruments - State of the Art and Future Prospects”, *Lecture Notes in Computer Science Springer Berlin / Heidelberg*, pp. 525-539, 2018.
- [J.4] Essl, G., **Lee, S. W.** “The Design of urMus as a Meta-environment for Mobile Music” *Journal of Creative Music Systems (JCMS)*, Vol. 1. Issue 2, pp. 1-44, 2017.
- [J.3] **Lee, S. W.**, Freeman, J. “Real-time Music Notation in Mixed Laptop-Acoustic Ensembles” *Computer Music Journal (CMJ)* 37:4, Winter, MIT Press, pp. 24-36, 2013.
- [J.2] Kim, Y., **Lee, S. W.**, Lee, D. H., Kim, J., Lee, M. W. “Sound Detection as an Aid to Increase Detectability of CCTV in Surveillance System” *Lecture Notes in Computer Science Volume 4560/2007 Springer Berlin / Heidelberg*, pp. 382-389, 2007.
- [J.1] Park, W., Kim, D., Kim, K., **Lee, S. W.**, Lee, M.W., “A method for forecasting demand of High Touch product using matrix analysis of target populations and product functions” *Journal of the ESK (Ergonomics Society of Korea)* Vol. 26, No. 1. ESK., pp. 79-85, 2007.

## Theses

- [T.2] **Lee, S. W.** “Improving User Involvement through Live Collaborative Creation.” Ph.D. Dissertation, University of Michigan. 2018.
- [T.1] **Lee, S. W.** “Audience Participation Using Mobile Phones as Musical Instruments.” Master’s Thesis, Georgia Tech. Available at <http://hdl.handle.net/1853/44749>, 2012.

## Lightly Reviewed Papers - Posters, Notes, and Workshop Papers

- [S.39] Hu, D., Bae, J., Lim, S. I., **Lee, S. W.**, “Context-Aware Sit-Stand Desk for Promoting Healthy and Productive Behaviors”, Poster, In *The ACM Symposium on User Interface Software and Technology (UIST)*, San Francisco, California, 2023.
- [S.38] Vargas-Diaz, D., Karunaratna, S., Kim, J., Choi, K., **Lee, S. W.**, “TaleMate: Collaborating with Voice Agents for Parent-Child Joint Reading Experiences”, Poster, In *The ACM Symposium on User Interface Software and Technology (UIST)*, San Francisco, California, 2023.
- [S.37] Bowman Jr., D., Manesh, D., **Lee, S. W.** “SHARP: Supporting Exploration and Rapid State Navigation in Live Coding Music”, the *International Conference on New interface for Musical Expression (NIME)*, Mexico City, Mexico, 2023
- [S.36] Thomas Jr., J., **Lee, S. W.**, Giovannelli, A., Lane, L., Bowman, D. A., “A Communication-Focused Framework for Understanding Immersive Collaboration Experiences” *Workshop Paper, Mixing*

Realities: Cross-reality Visualization, Interaction, and Collaboration, Workshop at the 30th IEEE Conference on Virtual Reality and 3D User Interface (IEEE VR), 2023

- [S.35]  Phan, T., Bowman, D. A., **Lee, S. W.**, “Integrating Traditional Input Devices to Support Rapid Ideation in an Augmented-reality-based Brainstorming” Poster, In The ACM Symposium on User Interface Software and Technology (**SUI**), Virtual, 2022. **the Best Poster award**
- [S.34] Wang, B., **Lee, S. W.**, “TaskScope: Fostering Holistic View on To-do List With Tracking Plan and Emotion” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST**), Bend, Oregon, 2022.
- [S.33] Wang, B., Manesh, D., Hu, R., **Lee, S. W.**, “iThem: Programming Internet of Things Beyond Trigger-Action Pattern” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST**), Bend, Oregon, 2022.
- [S.32] Islam, M.S., Sayani, N., Harden, S.M., **Lee, S. W.**, Lim, S., “An Observational Study Investigating Verbal Communication Differences in Online vs. In-person Group Exercise Training”, Extended Abstract, the International Annual Meeting of the Human Factors and Ergonomics Society (**HFES**), Atlanta, GA, 2022.
- [S.31] Manesh, D., Khalid, K., Murzi, H., Awolusi, I., Akanmu A., **Lee, S. W.** “Octave: Designing a Data Science Environment for Domain Experts” In the ACM CHI 2022 Workshop: Interrogating human-centered data science: Taking stock of opportunities and limitations
- [S.30] Akanmu A., Akligo, V. S., Ogunseiju O., **Lee, S. W.**, Murzi, H. “Data Analytics and Computational Thinking in Construction Engineering and Management Education: A Conceptual System” In the Construction Research Congress 2022 (CRC 2022)
- [S.29] Roofigari-Esfahan N., Porterfield C., Ogle T., Upthegrove T., Jeon M., **Lee, S. W.** “Group-based VR Training to Improve Hazard Recognition, Evaluation, and Control for Highway Construction Workers” In the IEEE VR workshop (VRW) on eXtended Reality for Industrial and Occupational Supports (XRIOS), 2022
- [S.28] Tausif M. T., Khanna, S., Ryu, D. S., Bennett, S. R., Moon, H. S., **Lee, S. W.**, Jeon, M., “Evaluating 6DOF monoscopic tablet devices for an inclusive, immersive, and social virtual environment” In the ACM CHI 2021 Workshop on Design and Creation of Inclusive User Interactions Through Immersive Media, 2021
- [S.27] Isaza, C. A. B., **Lee, S. W.**, “Understanding the needs of socio-technical interventions for rural communities in areas affected by anti personnel mines” In the ACM CHI 2021 Workshop: Decolonizing HCI across borders, 2021
- [S.26] Aftab, A., Hu, R., **Lee, S. W.**, “Remo: Generating Interactive Tutorials through Demonstration by Remote Peers to Assist Older Adults” In the ACM CHI 2021 Workshop on Designing Interactions for the Ageing Populations - Addressing Global Challenges, 2021
- [S.25] Li, Y., Hicks, D., Lages, W.S., **Lee, S. W.**, Sharma, A., Bowman, B. A., “ARCritique: Supporting Remote Design Critique of Physical Artifacts through Collaborative Augmented Reality” In 2021 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW). IEEE., 2021
- [S.24] Grudinschi, M., Norland, K., **Lee, S. W.**, Lim, S., “The Effectiveness of Wearable Sensor-Based Vibrotactile Feedback in Yoga Training for Users with Visual Impairment” Abstract, The 12th International Conference on Applied Human Factors and Ergonomics (**AHFE**), New York, 2021.
- [S.23] Tausif, T. M., Weaver, R., **Lee, S. W.**, “Towards enabling eye contact and perspective control in video conference” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST**), Virtual, 2020.

- [S.22] Aftab, A., Hu, R., Lee, S. W., “Remo: Generating Interactive Tutorials by Demonstration for On-line Tasks” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST**), Virtual, 2020.
- [S.21] Hu, D., Lee, S. W., “Scrapbook: Screenshot-based Bookmark for Effective Curation of Digital Resources” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST**), Virtual, 2020.
- [S.20] Pasad, V., Wang, B., Lee, S. W., “Understanding the Challenges of Online Group Chat for Productive Discourse at Scale” Poster, In the International ACM Conference on Computer Supported Cooperative Work and Social Computing (**CSCW**), Virtual, 2020.
- [S.19] Hickman, M., Pasad, V., Sanghavi, H., Thebault-Spieker, J., Lee, S. W., “Wiki HUES: Understanding Wikipedia practices through Hindi, Urdu, and English takes on evolving regional conflict” Note, International Conference on Information and Communication Technologies and Development (**ICTD**), Guayaquil, Ecuador, 2020.
- [S.18] Sun, S., Lee, S. W., Jeon, M., “VR Viewfinder - the Effects of Enabling Third-person Perspectives for Bystanders on VR-based Interactive Arts” Workshop paper, In The ACM CHI Social Virtual Reality(VR) Workshop (**CHI**), 2020.
- [S.17] Sun, S., Lee, S. W., Jeon, M., “VR Viewfinder - the Effects of Enabling Third-person Perspectives for Bystanders on VR-based Interactive Arts” Poster, In The ACM Capital Region Celebration of Women in Computing (**CAPWIC**), Newport News, Virginia, 2020.
- [S.16] Hu, D., Lee, S. W., “ScreenTrack: Using Visual History for Self-tracking Computer Activities and Retrieving Working Context” Poster, In The ACM Symposium on User Interface Software and Technology (**UIST 2019**), New Orleans, Louisiana, 2019.
- [S.15] **Lee, S. W.**, “Computer-mediated Empathy”, Algorithms That Make You Think, the Fourth Annual Virginia Tech Workshop on the Future of Human-Computer Interaction 2019. Blacksburg, VA.
- [S.14] **Lee, S. W.**, “Liveness in Interactive Systems”, the CSCW 2018 workshop on Hybrid Events (**CSCW**) 2018. Jersey City, NJ.
- [S.13] Herskovitz, J., Chinnam, J., Wong, I., Liu, M., Mo, J., **Lee, S. W.**, Lasecki, W. S., “Crowdsourcing for Effortless Creation of Collaborative AR Spaces”, the CHI 2018 workshop on Novel Interaction for Collaboration in VR (**CHI**) 2018. Montreal, QC.
- [S.12] **Lee, S. W.**, Chen, Y., Lasecki, W.S., “The Need for Real-Time Crowd Generation of Task Lists from Speech”, In AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**), Quebec City, Canada, 2017.
- [S.11] **Lee, S. W.**, “Hybrid Use of Asynchronous and Synchronous Interaction for Collaborative Creation” Doctoral Symposium, In The ACM Symposium on User Interface Software and Technology (**UIST**), Quebec City, Canada, 2017.
- [S.10] **Lee, S. W.**, “Integrating Asynchronous Interaction into Real-time Collaboration for Crowdsourced Creation” Boaster-Poster, In Human-Computer Interaction Consortium (**HCIC 2017**), Watsonville, CA, 2017.
- [S.9] **Lee, S. W.**, Chen, Y., Klugman, N., Gouravajhala, S. R., Chen, A., Lasecki, W.S., “Exploring Coordination Models for Ad Hoc Programming Teams”, the ACM Conference on Human Factors in Computing Systems (**CHI**) 2017. Denver, CO, 2017.
- [S.8] **Lee, S. W.**, Carvalho, A. D., Essl, G. “Crowd in C[loud] : Audience Participation Music with Online Dating Metaphor using Cloud Service”, Invited as an Encore Track Paper at the AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**), Austin, TX, 2016.
- [S.7] **Lee, S. W.**, Yang Y., Yan, S., Zhang, Y., Wong, I., Tan, Z., McGruder, M., Homan, C., Lasecki, W.S.



“Creating Interactive Behaviors in Early Sketch by Recording and Remixing Crowd Demonstrations”, In AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**), Austin, TX, 2016.

[S.6] **Lee, S. W.** “Integrating Asynchronous Interaction into Real-time Collaboration for Crowdsourced Creation” Doctoral Consortium, In AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**), Austin, TX, 2016.

[S.5] **Lee, S. W.**, Essl, G., “Hooking up Web Audio to WebGL Typography”, Demo presented in Web Audio Conference (**WAC**). Atlanta,GA, 2016.

[S.4] **Lee, S. W.**, Hejazi, C., Yoshioka, B., “Improvisation on a live-coded mobile musical instrument using urMus”, Demo Presented. In the First International Workshop on Live Programming in conjunction with ICSE, San Francisco, CA , 2013.

[S.3] Freeman, J., **Lee, S. W.**, Yao, S., Albin, A. “LOLC for Laptop Music Ensemble” Panel Discussion in “Creativity and Improvisation” session at ACM Creativity & Cognition(**CC**), Atlanta, GA, 2011.

[S.2] **Lee, S. W.**, Freeman, J., Collela, A., Yao, S., Troyer, A.“Collaborative Musical Improvisation in a Laptop Ensemble with LOLC”, In Proceedings of the ACM Creativity & Cognition (**CC**), Atlanta, GA, 2011.

[S.1] Albin, A., **Lee, S. W.**, Chordia, P. “Visual Anticipation Aids in Synchronization Tasks”, the Society for Music Perception and Cognition 2011 University of Rochester, NY, 2011.

## Book Chapters

[B.1] **Lee, S. W.**, Taylor, B., Essl G., “Interactive Music with Web Audio”, Foundation in Sound Design for Interactive Media, Routledge, 2019.

## External Grants

2024 **Collaborative Research: SaTC: CORE: Medium: Using Intelligent Conversational Agents to Empower Adolescents to be Resilient Against Cybergrooming**  
Jin-Hee Cho (Lead PI at VT), Sang Won Lee (Co-PI, 21%), Lifu Huang (Co-PI), Pamela Wisniewski (PI at Vanderbilt)  
Total Award Value \$1,200,000 (Personal Share 21%)  
National Science Foundation, SaTC program, Grant No-2330940

2023 **Using Intelligent Conversational Agents to Empower Adolescents to be Resilient Against Cybergrooming**  
Jin-Hee Cho (PI), Sang Won Lee (Co-PI, 33%), Sang Won Lee (Co-PI),  
Total Award Value \$75,000  
Commonwealth Cyber Initiative

2023 **Context-Aware Sit-Stand Intervention for Promoting Healthy Behaviors in Knowledge Workers**  
Sol Lim (PI), Sang Won Lee (Co-PI, 50%)  
Total Award Value \$27,500  
Office Ergonomics Research Committee

- 2022 **Supporting Under-Resourced Software Engineering Job Seekers through Facilitating On-line Collaboration in Technical Interview Preparation**  
Chris Brown (PI), Sang Won Lee (Co-PI, 50%)  
Total Award Value \$60,000 (Unrestricted Gift)  
Google Award for Inclusion Research Program
- 2021 **RETTL: Facilitating socially constructed learning through a shared, mobile-based virtual reality platform in informal learning settings**  
Sang Won Lee (PI, 37%), Myounghoon Jeon (Co-PI), Jeffrey Ogle (Co-PI), Phyllis Newbill (Co-PI), Chelsea Lyles (Co-PI)  
Total Award Value \$849,999  
National Science Foundation, RETTL program, Grant No-2119011
- 2021 **Collaborative Research: Improving Students' Computational Thinking Skills in Construction Engineering and Management**  
Abiola Akanmu (PI), Sang Won Lee (Co-PI, 30%), Homero Murzi (Co-PI)  
Total Award Value \$477,340  
National Science Foundation, IUSE program, Grant No-2111003

## Internal Grants

- 2024 **Community Advisory Groups to Inform Youth Mental Health Needs in Southwest Virginia**  
Sam Kempker-Margherio (PI), Heather, Davis Borchetta (Co-PI), Rosanna Boljonis (Co-PI), Jody Russon (Co-PI), Sang Won Lee (Co-PI)  
Total Award Value \$10,000  
Whole Health Consortium at VT
- 2023 **Integrating AI voice assistants into touchscreens for young children's interactive math learning**  
Koeun Choi (PI), Sang Won Lee (Co-PI)  
Total Award Value \$30,000  
ISCE Scholars Program
- 2023 **Digital Games and Interactive Curriculum**  
Evan Lavender-Smith (PI), Sang Won Lee (Co-PI), Zach Duer (Co-PI), Michael Hsiao (Co-PI), Avery Wiscomb (Co-PI), Emmy Waldman (Co-PI), Dajana Nedic (Co-PI), James Ivory (Co-PI)  
Total Award Value \$23,500  
ICAT major SEAD Grant
- 2022 **Digital Games and Interactive Curriculum**  
Evan Lavender-Smith (PI), Sang Won Lee (Co-PI), Zach Duer (Co-PI), Michael Hsiao (Co-PI), Avery Wiscomb (Co-PI), Wallace Santos Lages (Co-PI), James Ivory (Co-PI)  
Total Award Value \$21,628  
ICAT major SEAD Grant
- 2021 **Socially-Connected and Ability-Aware Online Physical Training for Older Adults**  
Sol Lim (PI), Sang Won Lee (Co-PI), Samantha Harden (Co-PI), Sunwook Kim (Co-PI), Maury A. Nussbaum (Co-PI)

Total Award Value \$10,000  
ICTAS EFO-O Seed Investment Grant

2020 **Supporting Remote Design Critique of Physical Objects through Collaborative Augmented Reality**

Douglas Bowman (PI), David Hicks (Co-PI), Wallace Santos Lages(Co-PI), Sang Won Lee(Co-PI), Akshay Sharma(Co-PI)  
Total Award Value \$10,000  
ICAT Rapid Response Grant

2020 **VRViewfinder: Engaging Bystanders in VR-based Interactive Media Using Auxiliary Viewing Devices**

Sang Won Lee(PI), Myounghoon Jeon(Co-PI), Zach Duer(Co-PI)  
Total Award Value \$25,000  
ICAT major SEAD Grant

2019 **Enhancing connectedness through remote social touch with particle jamming**

Sang Won Lee(PI), Shahabedin Sagheb(Co-PI)  
Total Award Value \$3,000  
ICAT mini SEAD Grant

2018 **Understanding and Mining Patterns of Audience Engagement and Creative Collaboration in Largescale Crowdsourced Music Performances**

Sang Won Lee(Research Associate), Danai Koutra(PI), Walter Lasecki(Co-PI)  
Total Award Value \$75,000  
Michigan Institute for Data Science (MIDAS)

## Teaching Experiences

2018-Present Assistant Professor, Computer Science Department, Virginia Tech

- Introduction to GUI Programming and Graphics, Spring 2023, Spring 2020.
- Social Computing and Computer-supported Cooperative Work, Fall 2023, Fall 2021, Fall 2019.
- Collaboration, Creativity, and Computing, Spring 2021, Spring 2019.
- Creative Computing Studio, Spring 2023, Spring 2022, Fall 2020, Fall 2018.
- User Interface Software, Fall 2022.
- Introduction to Game Design and Game Studies, Fall 2023.

2012-2018 Graduate Research Assistant, University of Michigan, Ann Arbor

2013-2016 Graduate Student Instructor, University of Michigan, Ann Arbor

- User Interface Development, Fall 2016, Fall 2015, Winter 2014
- Intelligent Interactive Systems, Winter 2016
- Interactive Computer Graphics, Fall 2014

2013-Present Grader, University of Michigan, Ann Arbor

- Acoustics and Psychoacoustics, 2013-2018

2009 Tutor, Office of Accessible Education, Stanford University

2005-2007 Undergraduate Teaching Assistant, Human Factors Lab., Seoul National University

## Invited Talks

- Nov. 2023 *Toward Computer-mediated Empathy*, HCI@KAIST Fall Colloquium, Korea
- Nov. 2023, 2023 *Toward Computer-mediated Empathy*, Guest lecture, Crowdsourcing & Crowd-AI Systems, Penn State University
- May. 2023 *Record, Reveal, and Share: Computer-mediated Perspective Sharing*, Invited Seminar, NAVER Tech Talk series NAVER AI Lab, Korea
- Mar. 2023 *The CHCI Big Ideas Workshop Recap*, ICAT Playdate, Virginia Tech
- Oct. 2022 *Mobile-based VR for informal STEM learning*, ICAT Playdate, Virginia Tech
- Oct. 2022 *Record, Reveal, and Share: Computer-mediated Perspective Sharing*, Invited Seminar, HCIL Brown Bag Speaker Series, University of Maryland (UMD)
- Oct. 2022 *Record, Reveal, and Share: Computer-mediated Perspective Sharing*, Invited Seminar, Interactive Systems Research Center, University of Maryland at Baltimore County (UMBC)
- June. 2022 *Towards understanding computer-mediated empathy*, Invited Seminar, Kwangwoon University
- May. 2022 *Towards understanding computer-mediated empathy*, 2022 DGIST EECS Colloquium, DGIST
- Feb. 2022 *Human-Computer Interaction Research Applied to Everyday Life*, HCI Webinar, CS Alumni Event, Virginia Tech
- Feb. 2022 *YMMV: advice for conducting HCI research aboard*, Invited Talk, HCI Korea Society
- Sep. 2021 *VR Viewfinder: Towards inclusive and social virtual experience using motion-tracked tablets*, ICAT Playdate, Virginia Tech
- Aug. 2021 *Towards understanding liveness and computer-mediated empathy*, Invited Talk, HCI @ KAIST Seminar, KAIST
- Aug. 2021 *Towards understanding liveness and computer-mediated empathy*, Invited Talk, SNU Industrial Engineering Seminar, the Department of Industrial Engineering, Seoul National University
- Feb. 2021 *Towards understanding computer-mediated empathy*, Invited Talk, IST Research Seminar, the Department of Information Sciences and Technology, George Mason University
- Jan. 2021 *Embracing liveness and ubiquity in interactive music performances*, Guest Lecture, New Interfaces for Social Distant Collaboration (MUS4014H), The School of Performing Arts, Virginia Tech
- Nov. 2020 *Towards understanding computer-mediated empathy*, Invited Talk, Social Informatics Group, CHCI, Virginia Tech.
- Oct. 2020 *Improving user involvement through live collaborative creation*, Invited Talk, Culture Technology, KAIST, Korea.
- Oct. 2020 *Beyond Zoom: Towards effective remote collaboration in the COVID-19 pandemic*, Invited Talk, Graduate Seminar, Virginia Tech.
- Nov. 2019 *Improving user involvement through live collaborative creation*, Invited Talk, Computer Science, Texas A&M University.
- Mar. 2019 *Improving user involvement through live collaborative creation*, Invited Talk, School of Information, University of Arizona.
- Oct. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Galileo Seminar, Virginia Tech.
- Oct. 2018 *Exploring Real-Time Collaboration in Crowd-powered Systems*, Invited Talk, CHCI ICAT Playdate Seminar, Virginia Tech.

- Oct. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Engineering Research Seminar, Virginia Tech.
- Sep. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Graduate Seminar, Virginia Tech.
- Apr. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Design Science Seminar, University of Michigan.
- Mar. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Computer Science, University of Rochester.
- Mar. 2018 *Improving user involvement through live collaborative creation*, Invited Talk, Computer Science, Virginia Tech.
- Mar. 2018 *Improving user involvement through live collaborative creation*, MISC Talks Series, University of Michigan.
- Feb. 2017 *Improving user involvement through live collaborative creation*, Invited Talk, Informatics Department, New Jersey Institute of Technology.
- Oct. 2017 *SketchExpress: Remixing Animations for More Effective Crowd-Powered Prototyping of Interactive Interfaces*, MISC Talks Series, University of Michigan.
- Aug. 2015 *Networked Collaboration and Communication in Live Coding*. Department of Computer Science, University of São Paulo - Brazil
- Apr. 2015 *Networked Collaboration and Communication in Live Coding*. Graduate School of Convergence Science and Technology, Seoul National University
- Apr. 2015 *Networked Collaboration and Communication in Live Coding*. Graduate School of Culture Technology, KAIST
- Apr. 2015 *Networked Collaboration and Communication in Live Coding*. Department of Industrial Engineering, Seoul National University
- Jan. 2015 *Performance Systems - Mobile Phones as Musical Instruments*. EECS 498: Mobile Phone Ensemble class, University of Michigan
- June 2012 *Audience Participation Using Mobile Phones as Musical Instruments*, Graduate School of Culture Technology, KAIST
- June 2012 *Music, Engineering and Music Technology*, School of Design and Human Engineering, UNIST
- June 2012 *Music, Engineering and Music Technology*, Department of Industrial Engineering, Hongik University

## Outreach, Exhibition, & Misc.

- Nov. 2023 Participated in VT Science Festival with “Solar System Explorer”, Blacksburg, VA. <https://www.wdbj7.com/2023/10/31/science-museum-western-virginia-previews-stem-events/>
- July. 2023 Participated in Summer Camp at Science Museum of Western Virginia with “Solar System Explorer”, Roanoke, VA.
- July. 2023 Taught Class “Learning Programming via Algorithmic Music Making and Beyond” in TechGirls Camp (<https://techgirlsglobal.org/>), Blacksburg, VA.
- Apr. 2023 Exhibited “Solar System Explorer” in Hokie for a Day, Center for Educational Networks and Im-

- pacts (CENI), Blacksburg, VA.
- Feb. 2023 Exhibited "Solar System Explorer" in Prices Fork STEM Night, Blacksburg, VA.
- Nov. 2022 Exhibited "Solar System Explorer" in Hokie for a Day, Center for Educational Networks and Impacts (CENI), Blacksburg, VA.
- Nov. 2022 Exhibited "Solar System Explorer" in Virginia Tech Science Festival, Blacksburg, VA.
- May. 2022 Online showcase of Creative Computing Studio Capstone Projects, <https://wordpress.cs.vt.edu/ccs2022s>, Virtual
- Jan. 2021 Online showcase of Creative Computing Studio Capstone Projects, <https://wordpress.cs.vt.edu/ccs2020f/>, Virtual
- Nov. 2017 -Apr. 2018 Mentored high school students from underrepresented minority groups in "Wolverine Pathways Program", Ann Arbor, MI, United States.
- June 2017 Led "POSSE Workshop: Making Music in Programming using EarSketch." (Workshop) @ POSSE Foundation, 2017, Ann Arbor, MI, United States.
- May 2017 Led Workshop "Setting up and running a Mobile Phone Orchestra" @ the International Conference on New interface for Musical Expression (**NIME**) 2017, Copenhagen, Denmark
- July 2016 Led "POSSE Workshop: Making Music in Programming using EarSketch." (Workshop) @ POSSE Foundation, 2016, Ann Arbor, MI, United States.
- Sep. 2011 Exhibited *Crossole* in Atlanta Maker Faire.
- June 2011 Led *LOLC* workshop with local gifted high school students in Hands On Tech (H.O.T.) Camp. Georgia Tech., Atlanta, MI, United States
- May 2011 Exhibited *Stickies Music* in GT Salon Exhibition at Hinman Building, Georgia Tech.

## Career Development Workshops and Symposia

- 2023 CISE NSF CAREER Workshop
- 2020 CISE NSF CAREER Workshop
- 2019 Early Career Symposium, ACM CHI, Glasgow, United Kingdom
- 2019 Professional Development Institute (PDI) Program, Virginia Tech, Blacksburg, VA
- 2018 New Computing Faculty Workshops in Summer 2018 (CRA, NSF-supported) San Diego, CA
- 2018 Preparing Future Faculty Workshop, Rackham-CRLT, University of Michigan, Ann Arbor, MI
- 2017 **UIST** 2017 Doctoral Symposium (The ACM Symposium on User Interface Software and Technology), Quebec City, Canada
- 2017 Selected as a HCIC-Funded Student in University of Michigan to participate in Human Computer Interaction Consortium(**HCIC**) 2017 "Designing Future".
- 2016 **HCOMP** 2016 Doctoral Consortium participant (International Conference on Human Computation and Crowd-sourcing), Austin, Texas

## Industry Experiences

- 2015 Research Intern, Media Technology Lab., Gracenote Inc.
- Developed a lyric-audio alignment system using voice synthesis and vocal separation. [P.20]
- 2014 Web Programmer/Designer, Massachusetts General Hospital
- Developed an interactive website that enables researchers to manage contents. (<http://cfsib.com>)
- 2010-2011 Web Programmer/Designer, Stanford University
- Developed an interactive website that enable researchers to retrieve genome-wide expression data of patients. (<http://gluegrant1.stanford.edu/DIC>)
- 2010 Database Engineer, TrimTabs Investment Research.
- Developed of a system and database for crawling, storing, and reporting on data of insider transactions.
- 2009-2010 Independent Contractor, DamnTheRadio Inc.
- Implemented a web crawler to collect live performance data from an online ticketing site.
- 2009-2010 Tech. Desk Consultant, Stanford University
- Provided technical support for students in multimedia studio of Meyer library.
- 2009 Financial Technology Intern, TrimTabs Investment Research
- Created and tested scripts for automating Exchange Traded Fund (ETF) report production.

## Music Performances, Artwork, & Composition

- Mar. 2020 Performed *Live Writing: Gloomy Street* in NYU IAPS concert. New York, NY.
- Dec. 2019 Performed *Live Writing: Gloomy Street* in DISIS Faculty Concert. Blacksburg, VA.
- Sep. 2019 Performed *Crowd in C[loud]* in the Information, Expression, and Immersion Symposium 2019, Blacksburg, VA.
- June. 2019 Performed *Crowd in C[loud]* in ACM Creativity and Cognition Conference(C&C) 2019, San Diego, CA.
- Dec. 2018 Performed *Crowd in C[loud]* in DISIS Faculty Concert. Blacksburg, VA.
- Aug. 2018 Presented: *Live Coding YouTube* in International Conference on Computer Music(ICMC) 2018. Daegu, South Korea
- July. 2018 Performed: *Live Coding YouTube* accepted at New York City Electroacoustic Music Festival (NYCEMF) 2018. New York
- Apr. 2018 Performed: *Live Coding YouTube* accepted at CHI Art Program, the ACM Conference on Human Factors in Computing Systems (CHI) 2018. Montreal, Canada. 2018
- Dec. 2017 Presented Performance: *jimmy raps with Live Writing*, collaborated with D. Andrew STEWART, accepted at the International Conference on Live Coding (ICLC) 2017. Morelia, Mexico. 2017
- Aug. 2017 Performed *Live Writing: Gloomy Streets* accepted at the Toronto International Electroacoustic Symposium (TIES) 2017. Toronto, ON, Canada. 2017
- May. 2017 Performed: *Live Coding YouTube* accepted at in International Conference on New Interface for Musical Expression(NIME) 2017. Copenhagen, Denmark. 2017
- May. 2017 Presented *DISAPPEARING : Live Writing*, collaborated with D. Andrew STEWART, accepted at in International Conference on New Interface for Musical Expression(NIME) 2017. Copenhagen, Denmark. 2017

May. 2017 Performed Performance: *Live Writing: Gloomy Streets* accepted at CHI Art Program, the ACM Conference on Human Factors in Computing Systems (**CHI**) 2017. Denver, CO. 2017

Mar. 2017 Performed *Live Coding YouTube* in Performing Arts Technology Showcase 2017. McIntosh Theatre, University of Michigan.

Oct. 2016 Performed *Crowd in C[loud]* in International Conference on Live Coding(**ICLC**) 2016. Hamilton, Canada.

Sep. 2016 Performed *Live Writing: Gloomy Streets* in International Conference on Computer Music(**ICMC**) 2016. Utrecht, Netherlands. - **Won ICMA 2016 Music Award (Student)**

July. 2016 Performed *Live Writing: Gloomy Streets* in the International Conference on New Interface for Musical Expression(**NIME**) 2016. Brisbane, Australia.

Apr. 2016 Performed *Crowd in C[loud]* in Web Audio Conference (**WAC**) 2016. Atlanta, Georgia.

Apr. 2016 Composed and Presented *Live Writing: Shatter*, Written and Performed by HoneyLess in Web Audio Conference (**WAC**) 2016. Atlanta, Georgia.

Aug. 2015 Performed *Aural Cavity* in International Conference on Computer Music(**ICMC**) 2015. Denton, Texas.

Apr. 2015 Composed and Presented *Live Writing: Reflection*, Performed by HoneyLess in Michigan Mobile Phone Ensemble: Final Class Concert 2015, Stamps Auditorium

Apr. 2015 Performed *Crowd in C[loud]* in Michigan Mobile Phone Ensemble: Final Class Concert 2015, Stamps Auditorium

Mar. 2015 Performed *Live Writing: Gloomy Streets* in Performing Arts Technology Showcase 2015. Britton Recital Hall, University of Michigan.

Feb. 2015 Performed *Aural Cavity* in Guthman Musical Instrument Competition, Georgia Tech.

Mar. 2014 Performed *Aural Cavity* in Performing Arts Technology Showcase 2014. Britton Recital hall, University of Michigan.

Mar. 2014 Performed *Aural Cavity* in Final Concert of Interactive Media Design. Design Lab 1, University of Michigan.

Apr. 2013 Performed *Improvisation on a live-coded mobile music instrument* in Michigan Mobile Phone Ensemble: Final Class Concert 2013, Stamps Auditorium

Apr. 2013 Performed *T'ai Chi Theremin* in Michigan Mobile Phone Ensemble: Final Class Concert 2013, Stamps Auditorium

May 2012 Performed *Where Are You Standing?* by Bongjun Kim, Woon Seung Yeo in the International Conference on New Interface for Musical Expression (**NIME**) 2012 at University of Michigan

Apr. 2012 Performed *Music Slave (Mobile Choir)* in Listening Machines 2012, Georgia Tech., Atlanta, GA.

Apr. 2012 Performed *echobo* in Listening Machines 2012, Georgia Tech., Atlanta, GA.

Feb. 2012 Performed *SGLC* by Jason Freeman in Sonic Generator Concert (Video), Woodruff Art Center, Atlanta, GA

Nov. 2011 Performed *LOLC* in ACM Creativity and Cognition Conference (**C&C**) 2011, Atlanta. - **Won Best Artwork Award**

May 2011 Performed *LOLC* in the International Conference on New Interface for Musical Expression (**NIME**) 2011 at University of Oslo, Norway.

Apr. 2011 Performed *Crossole* in Listening Machines 2011 at Stubbins Gallery, Georgia Tech., Atlanta, GA.



- Mar. 2011 Exhibited *Stickies Music* in Sonic Generator Concert at Woodruff Art Center, Atlanta, GA.
- Oct. 2010 Performed *LOLC* in FutureMedia Fest 2010 at Georgia Tech, Atlanta, GA.
- Oct. 2010 Performed *BeatScape* in FutureMedia Fest 2010 at Georgia Tech, Atlanta, GA.

## Service to the profession

### Paper Reviewer

- 2017-Present The ACM Conference on Creativity & Cognition (**C&C**)
- 2017-Present The ACM Conference on Human Factors in Computing Systems (**CHI**)
- 2015-Present The International Conference on New Interfaces for Musical Expression (**NIME**)
- 2018-2023 The ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW**)
- 2016-2022 The ACM Symposium on User Interface Software and Technology (**UIST**)
- 2022 Behaviour & Information Technology
- 2022 International Journal of Human-Computer Studies (**IJHCS**)
- 2022 The Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (**IMWUT**)
- 2022 The International Conference on Movement and Computing Conference (**MOCO**)
- 2020-2021 The Web Conference (formerly known as **WWW**)
- 2021 The ACM SIGCHI Conference on Designing Interactive Systems (**DIS**)
- 2019 The International Symposium on Electronic Art (**ISEA**)
- 2015-2018 The International Conference on Live Coding (**ICLC**)
- 2016-2018 The International Society for Music Information Retrieval (**ISMIR**)
- 2016-2018 The Web Audio Conference (**WAC**)
- 2016 the International Journal of Performance Arts and Digital Media
- 2014 EAI Endorsed Transactions on Creative Technologies.
- 2012 the International Conference on Auditory Display (**ICAD**)

### Conference Organizers/Editors

- 2024-2025 Treasury Chair -The ACM Conference on Creativity & Cognition (**C&C**)
- 2024 Associate Chair - The ACM Conference on Human Factors in Computing Systems (**CHI**), User Experience and Usability Subcommittee
- 2023-2024 Treasurer - The ACM Symposium on User Interface Software and Technology (**UIST**)
- 2023 Program committee - The ACM Collective Intelligence
- 2023 Graduate Symposium Chair - The ACM Conference on Creativity & Cognition (**C&C**)
- 2022 Associate Chair - The ACM Conference on Human Factors in Computing Systems (**CHI**), Specific Applications Areas Subcommittee
- 2021 Technology Co-chairs - The AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**)
- 2021 Program Committee - The ACM Conference on Creativity & Cognition (**C&C**)
- 2021 Associate Chair - The ACM Conference on Computer-Supported Cooperative Work and Social Computing (**CSCW**)

2021 Online Experience Chair - The International Symposium on Mixed and Augmented Reality (**ISMAR**), Virtual

2021 Technical Chair -the International Conference on Auditory Display (**ICAD**), Virtual

2020 Program Committee - ACM Collective Intelligence

2019 Senior Program Committee - The Web Conference (**WWW**)

2019 Program Committee, Session Chair - The ACM Conference on Creativity & Cognition (**C&C**)

2018 Publication Chair - The International Conference on New Interfaces for Musical Expression (**NIME**)

2017-2018 Michigan Interactive and Social Computing Research Group (**MISC**) student coordinator.

2017-2018 Tool Curating Administrator in CROMALab

2018 Student Panel, 2018 Prospective Ph.D. Student Visit, University of Michigan

2018 Judge, 2018 Makeathon Competition, University of Michigan

2017 The International Computer Music Association Award Committee (**ICMA**)

2017 Student Volunteer, The ACM Conference on Human Factors in Computing Systems (**CHI**)

2017 Run Research and Development tutorials in CROMALab

2016 Computer Science and Engineering Graduation Admission Reviewers

2016-2017 MTurk/Upwork/hiring-platform support in CROMALab

2016 Program Committee member of Works-in-progress & Demonstration Papers, AAAI Conference on Human Computation and Crowdsourcing - **HCOMP**

2013 Music Jury, International Conference on Computer Music - **ICMC**, Perth, Australia

## Advisees

### Virginia Tech

#### Ph.D. students

Andrew Jelson (Ph.D., Computer Science, Qualified, Expected Graduation 05/2027)

Carlos Augusto Bautista Isaza (Ph.D., Computer Science, Qualified, Expected Graduation 12/2025)  
[P.44], [P.36], [S.27]

Daniel Manesh (Ph.D., Qualified, Computer Science, Qualified, Expected Graduation 05/2026)  
[P.42], [S.37], [S.33], [S.31]

Donghan Hu (Ph.D./Master, Computer Science, Qualified, Passed Prelim 01/2023, Expected Graduation 08/2024)

[P.45], [S.39], [P.38], [J. 6], [P.27], [S.21], [S.16]

Md Momen Bhuiyan (Ph.D., Computer Science, Graduated 2023, co-advisor: Dr. Tanu Mitra)

[P.43], [P.40], [P.36], [P.35], [P.34]

#### Master students

Amber Aftab (Master, Computer Science, Graduated 2022) [S.25], [S.22]

Andy Luu (Master/Undergraduate, Computer Science) [P.41]

Boyuan Marx Wang (Master/Undergraduate, Computer Science) [P.43], [J.6], [S.34], [S.33], [S.23], [S.20]

Dashiel Carrera (M.F.A, Creative Writing, Graduated) [P.37]  
Daniel Enriquez (Master, Computer Science)  
Daniel Vargaz-Diaz (Master, Computer Science) [S.38]  
Emily Altland (Master, Computer Science)  
Md Tausif Tashin (Master, Computer Science, Graduated 2022) [S.27], [S.23]  
Molly Hickman (Master, Computer Science, Graduated 2022) [P.32], [S.19]  
Muskan Gupta (Master, Computer Science)  
Nathaniel Llorens (Master, Computer Science, Graduated 2021)  
Robin Lu (Master/Undergraduate, Undergraduate, Computer Science)  
Rodney Okyere (Master/Undergraduate, Computer Science)  
Sulakna Binoka Kumarihamy Karunaratna (Master, Computer Science) [S.38]  
Tam Phan (Master, Computer Science, Graduated 2021) [S.35]  
Viral Pasad (Master, Computer Science, Graduated 2020) [P.32], [S.20], [S.19]  
Yi Lu (Master, Computer Science)

#### Undergraduate students

Clara Mcdaniel (Undergraduate, Computer Science)  
Drew Bowman (Undergraduate, Computer Science) [S.37]  
Doo Oh Kim (Undergraduate, Computer Science)  
Hennah Nazari (Undergraduate, Computer Science)  
Josh Cheng (Undergraduate, Computer Science)  
Joseph S. Bae (Undergraduate, Computer Science)  
Justin Lee (Undergraduate, Computer Science)  
Li Huang (Undergraduate, Computer Science)  
Noam Bendelac (Undergraduate, Computer Science)  
Ruihu Hu (Undergraduate, Computer Science) [S.33], [S.25], [S.22]  
Sarah Oh (Undergraduate, Computer Science)  
Soumya Khanna (Undergraduate, Computer Science)  
Taylor Thackaberry (Undergraduate, Computer Science)  
Teresa Thomas (Undergraduate, Computer Science)  
Weiqi Yuan (Undergraduate, Computer Science)  
Zach Monheim (Undergraduate, Computer Science)

#### **University of Michigan**

Jungho Bang (Master) [P.21]  
Jaylin Herskovitz (Undergraduate) [S.13, P.30]  
Rebecca Krosnick (Ph.D.) [P.25],[P.26]  
Mengyao Liu (Undergraduate) [S.13]  
Mari Martinez (Undergraduate) [P.16]  
Roshan Narayan (Undergraduate)  
Zhengxi Tan (Undergraduate) [S.7]  
Sach Vaidya (Undergraduate) [P.26]  
Aaron Willette (Undergraduate) [P.28]  
Isabelle Wong (Undergraduate)[P.23], [S.7], [S.13]  
Yin Xie (Master) [P.20]  
Yiwei Yang (Undergraduate) [P.23], [P.21], [S.7]  
Yujin Zhang (Undergraduate) [P.23]

#### **Other Universities**

So Yeon Park (Ph.D., Mechanical Engineering, Stanford University) [P.41], [P.31]

Last Updated: February 20, 2024