

Nikhil Krishnaswamy

<https://www.nikhilkrishnaswamy.com>

<https://www.signallab.ai>

Areas of Specialization

Artificial Intelligence; Computational Linguistics/Natural Language Processing; Machine Learning; Human-AI Collaboration; Human-Computer Interaction; Spatial Cognition and Reasoning.

Appointments Held

2020-present	<i>Assistant Professor</i> , Department of Computer Science, Colorado State University, Fort Collins, CO, USA
2017-2020	<i>Postdoctoral Associate</i> , Department of Computer Science, Brandeis University, Waltham, MA, USA

Other Affiliations

2024-2020	<i>Affiliate Faculty, Center for Ethics and Human Rights</i> , Colorado State University, Fort Collins, CO, USA
2022-present	<i>Affiliate Faculty, Data Science Research Institute</i> , Colorado State University, Fort Collins, CO, USA

Education

2017	PhD in Computer Science, Brandeis University, Waltham, MA, USA Advisor: <i>Prof. James Pustejovsky</i> . Committee: <i>Prof. Kenneth D. Forbus, Prof. Timothy J. Hickey, Dr. Marc Verbagen</i> .
2013	MA in Computational Linguistics, Brandeis University, Waltham, MA, USA
2010	BS in Computer Games Development, DePaul University, Chicago, IL, USA

Doctoral Thesis

2017	Krishnaswamy, N. (2017). <i>Monte-Carlo Simulation Generation Through Operationalization of Spatial Primitives</i> . PhD thesis, Brandeis University. <ul style="list-style-type: none">• Created VoxSim semantic event simulator and VoxML visual modeling language (now under development as an ISO standard).
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1 Research

Research Funding

- 2025-
2028
[R8] Army Research Office Military Information Sciences Branch: Modeling Causality in AI Through Embodiment and Analogy (Knowledge Systems Program). Award #W911NF-25-1-0096. Total CSU award \$415,154. Sole PI.
- 2024-
2029
[R7] Advanced Research Projects Agency for Health Resilient Systems Office: Vectors of Intelligent Guidance in Long-Reach Rural Healthcare (Platform Accelerating Rural Access to Distributed and Integrated Medical Care Program). Award #1AY2AX000062. Total CSU award \$2,838,262. CSU PI, multi-institution award, CSU non-lead.
- 2024-
2025
[R6] Defense Advanced Research Projects Agency Information Innovation Office: Transparency, Reflection, and Accountability in Conversational Exchanges (Friction for Accountability in Conversational Transactions AI Exploration). Award #HR00112490377. Total CSU award \$978,331. PI, multi-institution award, CSU lead.
- 2023-
2026
[R5] National Science Foundation Division of Information & Intelligent Systems: Research on Emerging Technologies for Teaching and Learning: An AI Tutoring System for Pollinator Conservation Community Science Training. Award #IIS 2303019. Total CSU award \$849,890. Co-PI.
- 2023
[R4] Army Research Office Military Information Sciences Branch: Embodied Computational Metacognition (Knowledge Systems Program – Short Term Innovative Research). Award #W911NF-23-1-0031. Total CSU award \$60,000. Sole PI.
- 2020-
2025
[R3] National Science Foundation Division of Research on Learning: AI Institute: Institute for Student-AI Teaming. Award #DRL 2019805. Total CSU award \$613,103. CSU PI, multi-institution award, CSU non-lead (Term as CSU PI: 2022-2025).
- 2020-
2022
[R2] National Science Foundation Division of Information & Intelligent Systems: NSF2026: EAGER: A Playground and Proposal for Growing an AGI. Award #IIS 2033932. Total CSU award \$12,000. Consultant.
- 2018-
2022
[R1] Defense Advanced Research Projects Agency Information Innovation Office: Representations of Vectors and Abstract Meanings for Information Synthesis (Active Interpretation of Disparate Alternatives Program). Award #FA8750-18-2-0016. Total CSU award \$436,178. CSU PI, multi-institution award, CSU non-lead (Term as CSU PI: 2022).

Honors & Awards

Where applicable, the publication or presentation receiving the award is cross-referenced following the award listing.

- 2024
[A8] Early Career (pre-tenure) Faculty Excellence in Teaching and/or Mentoring Award, College of Natural Sciences, Colorado State University.
- [A7] Best Student Paper, International Conference on Educational Data Mining (EDM). *Propositional Extraction from Natural Speech in Small Group Collaborative Tasks*. **[C45]**

- [A6] Best Paper Nominee, International Conference on Human-Agent Interaction (HAI). *Combating Spatial Disorientation in a Dynamic Self-Stabilization Task Using AI Assistants*. **[C44]**
- [A5] Outstanding Area Chair, Conference on Empirical Methods in Natural Language Processing (EMNLP).
- 2022 Best Paper, International Conference on Human-Computer Interaction (HCII). *Multimodal Semantics for Affordances and Actions*. **[C22]**
- [A4]
- [A3] Best Interactive Event, International Conference on Artificial Intelligence in Education (AIED). *iSAT speech-based AI display for small group collaboration in classrooms*. **[P2]**
- 2020 Best Demo, International Conference on Artificial Reality and Telexistence & Eurographics Symposium on Virtual Environments (ICAT-EGVE). *Situational Awareness in Human Computer Interaction: Diana's World*. **[C16]**
- [A2]
- 2019 Outstanding Reviewer, Conference on Empirical Methods in Natural Language Processing and International Joint Conference on Natural Language Processing (EMNLP-IJCNLP).
- [A1]

Invited Talks

- 2025 Krishnaswamy, N. (2025). Artificial Collaborative Intelligence: How AI Can Help Humans Be Better Teammates. Colorado State University Ram Talks Series.
- [T9]
- [T8] Krishnaswamy, N. (2025). How AI Can Build a Better Workforce (and Why It Might Not). Colorado State University HR Conference.
- 2023 Krishnaswamy, N. (2023). What We're (Not) Talking About When We Talk About AI.
- [T7] Colorado State University University Science Club.
- [T6] Krishnaswamy, N. (2023). Reasoning About Anomalous Object Interaction Using Plan Failure as a Metacognitive Trigger. ARO Workshop on Metacognitive Prediction of AI Behavior.
- [T5] Krishnaswamy, N. (2023). Embodiment, Metacognition, and Causality: What Will It Take to Go Beyond LLMs? Army Research Lab Natural Language Processing Round Table.
- [T4] Krishnaswamy, N. (2023). Exploiting Information Equivalence and Interchangeability between ML Representation Spaces. Rensselaer Polytechnic Institute Cognitive Science Seminar.
- 2021 Krishnaswamy, N. (2021). Situated Grounding and Natural Language for Embodied AI.
- [T3] University of Colorado Boulder Machine Learning Seminar.
- 2018 Krishnaswamy, N. (2018). Grounded Linguistic Interaction in Multimodal Environments.
- [T2] Colorado State University Computer Vision Seminar.
- 2015 Krishnaswamy, N. (2015). Inside the Language Technology Revolution. San Juan College Technology Leadership Conference.
- [T1]

Prior Research Experience

2017-
2020 *Postdoctoral Associate*, Brandeis University, Waltham, MA, USA

2013-
2017 *Graduate Research Fellow*, Brandeis University, Waltham, MA, USA

Peer-Reviewed Publications

In the below list, * indicates authors who are/were students of mine, † indicates authors who are/were mentees of mine outside of a formal advising relationship, ‡ indicates where I am the primary author on a publication, and § indicates where I am the senior author on a publication. = indicates equally-contributing authors. Acceptance rates for conferences and workshops and impact factors for journals are given where available. These numbers may reflect the rate for the specific instance listed or an average over previous years. Acceptance rates for *strongly refereed* conferences (those with an acceptance rate <40%), have been bolded. Any awards won by the publication are cross-referenced following the citation (see Section “Honors & Awards”).

Journal Articles

- 2025
[J7] *Venkatesha, V., *Nath, A., *Khebour, I., *Chelle, A., *Bradford, M., Tu, J., *VanderHoeven, H., †Bhalla, B., *Youngren, A., †Fitzgerald, J., Pustejovsky, J., Blanchard, N., and §Krishnaswamy, N. (2025). Propositional Extraction from Collaborative Naturalistic Dialogues. In *Journal of Educational Data Mining (JEDM)*. International EDM Society. **[Impact factor: 2.2]**
- 2024
[J6] *Khebour, I., Brutti, R., Dey, I., †Sikes, K., Lai, K., *Bradford, M., *Cates, B., *Hansen, P., †Jung, C., †Wisniewski, B., †Terpstra, C., Hirshfield, L. M., Puntambekar, S., Blanchard, N., Pustejovsky, J., and §Krishnaswamy, N. (2024). When Text and Speech Are Not Enough: A Multimodal Dataset of Collaboration in a Situated Task. *Journal of Open Humanities Data*. DOI: <https://doi.org/10.5334/johd.168>
- 2023
[J5] †Henlein, A., *Gopinath, A., Krishnaswamy, N., Mehler, A., and Pustejovsky, J. (2023). Grounding Human-Object Interaction to Affordance Behavior in Multimodal Datasets. *Frontiers in Artificial Intelligence: Section Language and Computation*, 6. **[Impact factor: 4.0]** DOI: <https://doi.org/10.3389/frai.2023.1084740>
- [J4] =Oved, I., =Krishnaswamy, N., =Pustejovsky, J., and =Hartshorne, J. K. (2023). Neither neural networks nor the language-of-thought alone make a complete game (In response to: The best game in town: The reemergence of the language-of-thought hypothesis across the cognitive sciences). *Behavioral and Brain Sciences*, 46. **[Impact factor: 21.4]** DOI: <https://doi.org/10.1017/S0140525X23001954>
- 2022
[J3] †Krishnaswamy, N. and Pustejovsky, J. (2022). Affordance Embeddings for Situated Language Understanding. *Frontiers in Artificial Intelligence: Section Language and Computation*, 5. **[Impact factor: 4.0]** DOI: <https://doi.org/10.3389/frai.2022.774752>
- 2021
[J2] Pustejovsky, J. and Krishnaswamy, N. (2021). Embodied Human Computer Interaction.

KI - Künstliche Intelligenz: Special Issue on NLP and Semantics, 35(3):307–327. **[Impact factor: 1.8]** DOI: <https://doi.org/10.1007/s13218-021-00727-5>

- [J1] Pustejovsky, J. and Krishnaswamy, N. (2021). Situated Meaning in Multimodal Dialogue: Human-Robot and Human-Computer Interactions. *Traitement Automatique des Langues: Special Issue on Dialog and Dialog Systems*, 61(3):17–41.

Book Chapters

- 2025
[B4] Wei, H., Shakarian, P., Lebiere, C., Draper, B., Krishnaswamy, N., Sreedharan, S., and Nirenburg, S. (2025). Metacognitive AI. In *Metacognitive Artificial Intelligence*. Cambridge University Press. (*In press*).
- [B3] Krishnaswamy, N. (2025). Reasoning About Anomalous Object Interaction Using Plan Failure as a Metacognitive Trigger. In *Metacognitive Artificial Intelligence*. Cambridge University Press. (*In press*).
- 2018
[B2] ‡Krishnaswamy, N. and Pustejovsky, J. (2018). Deictic Adaptation in a Virtual Environment. In *Spatial Cognition XI: International Conference on Spatial Cognition*. Springer. [Acceptance rate: 50%]
- 2016
[B1] ‡Krishnaswamy, N. and Pustejovsky, J. (2016). Multimodal Semantic Simulations of Linguistically Underspecified Motion Events. In *Spatial Cognition X: International Conference on Spatial Cognition*. Springer. [Acceptance rate: 55%]

Magazine Articles

- 2024
[M1] D’Mello, S. K., =Biddy, Q., =Breideband, T., =Bush, J., =Chang, M., =Cortez, A., =Flanigan, J., =Foltz, P. W., =Gorman, J. C., =Hirshfield, L. M., =Ko, M., =Krishnaswamy, N., =Lieber, R., =Martin, J. H., =Palmer, M., =Penuel, W. R., =Philip, T., =Puntambekar, S., =Pustejovsky, J., =Reitman, J. G., =Sumner, T., =Tissenbaum, M., =Walker, M., and =Whitehill, J. (2024). From learning optimization to learner flourishing: Reimagining AI in Education at the Institute for Student-AI Teaming (iSAT). In *AI Magazine*. Wiley. DOI: <https://doi.org/10.1002/aaai.12158>

Refereed Conference Proceedings

- 2025
[C59] *Nath, A., Volozin, A., Saha, S., Nanda, A. A., Grunin, G., Bhotika, R., and §Krishnaswamy, N. (2025). DPL: Diverse Preference Learning Without A Reference Model. In *Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL)*. ACL. (*Accepted for publication*).
- [C58] *VanderHoeven, H., †Bhalla, B., *Khebour, I., *Youngren, A., *Venkatesha, V., *Bradford, M., †Fitzgerald, J., *Mabrey, C., Tu, J., Zhu, Y., Lai, K., †Jung, C., Pustejovsky, J., and §Krishnaswamy, N. (2025). TRACE: Real-Time Multimodal Common Ground Tracking in Situated Collaborative Dialogues. In *Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL): System Demonstrations*. ACL. (*Accepted for publication*).
- [C57] *Mannan, S. and §Krishnaswamy, N. (2025). Bidirectional Human-AI Learning in Real-Time Disoriented Balancing. In *AAAI Conference on Artificial Intelligence (AAAI): Demos*

- Program. AAAI. **[Acceptance rate: 36%]**
- [C56] Palmer, D., Zhu, Y., Lai, K., *VanderHoeven, H., *Bradford, M., *Khebour, I., *Mabrey, C., †Fitzgerald, J., Krishnaswamy, N., Palmer, M. S., and Pustejovsky, J. (2025). Speech Is Not Enough: Interpreting Nonverbal Indicators of Common Knowledge and Engagement. In *AAAI Conference on Artificial Intelligence (AAAI): Demos Program*. AAAI. **[Acceptance rate: 36%]**
- [C55] *Khebour, I., †Jung, C., †Fitzgerald, J., †Jamil, H., and §Krishnaswamy, N. (2025). Feature Contributions to Multimodal Interpretation of Meaning. In *International Conference on Human-Computer Interaction (HCII)*. Springer. (Accepted for publication). **[Avg. acceptance rate: 29%]**
- [C54] *Bradford, M., *Khebour, I., *VanderHoeven, H., Blanchard, N., and §Krishnaswamy, N. (2025). Tracking Individual Beliefs in Co-Situated Groups Using Multimodal Input. In *International Conference on Human-Computer Interaction (HCII)*. Springer. (Accepted for publication). **[Avg. acceptance rate: 29%]**
- [C53] Zhu, Y., *Khebour, I., Lai, K., Verhagen, M., Krishnaswamy, N., and Pustejovsky, J. (2025). Multimodal Situational Awareness: Neuro-Symbolic AI for Real-Time HCI in the Classroom. In *International Conference on Human-Computer Interaction (HCII)*. Springer. (Accepted for publication). **[Avg. acceptance rate: 29%]**
- 2024
[C52] *Nath, A., *Manafi, S., *Chelle, A., and §Krishnaswamy, N. (2024). Okay, Let’s Do This! Modeling Event Coreference with Generated Rationales and Knowledge Distillation. In *North American Chapter of the Association for Computational Linguistics (NAACL)*. ACL. **[Acceptance rate: 23%]**.
- [C51] *Nath, A., *Venkatesha, V., *Bradford, M., *Chelle, A., *Youngren, A., *Mabrey, C., Blanchard, N., and §Krishnaswamy, N. (2024). “Any Other Thoughts, Hedgehog?” Linking Deliberation Chains in Collaborative Dialogues. In *Findings of the Association for Computational Linguistics: EMNLP 2024 (Findings of EMNLP)*. ACL. **[Acceptance rate: 17%]**
- [C50] *Ghaffari, S. and §Krishnaswamy, N. (2024). Large Language Models Are Challenged by Habitat-Centered Reasoning. In *Findings of the Association for Computational Linguistics: EMNLP 2024 (Findings of EMNLP)*. ACL. **[Acceptance rate: 17%]**
- [C49] Oved, I., Krishnaswamy, N., Pustejovsky, J., and Hartshorne, J. K. (2024). Computational Thought Experiments for a More Rigorous Philosophy and Science of the Mind. In *Annual Meeting of the Cognitive Science Society (CogSci)*. Cognitive Science Society. **[Acceptance rate: 19%]**.
- [C48] *Nath, A., †Jamil, H., †Ahmed, S. R., Baker, G., *Ghosh, R., Martin, J. H., Blanchard, N., and §Krishnaswamy, N. (2024). Multimodal Cross-Document Event Coreference Resolution Using Linear Semantic Transfer and Mixed-Modality Ensembles. In *Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*. ACL. [Acceptance rate: 44%]
- [C47] *Khebour, I., Lai, K., *Bradford, M., Zhu, Y., Brutti, R., Tam, C., Tu, J., *Ibarra, B., Blanchard, N., Krishnaswamy, N., and Pustejovsky, J. (2024). Common Ground Tracking in Multimodal Dialogue. In *Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*. ACL. [Acceptance rate: 44%]

- [C46] *Manafi, S. and §Krishnaswamy, N. (2024). Cross-Lingual Transfer Robustness to Lower-Resource Languages on Adversarial Datasets. In *Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING)*. ACL. [Acceptance rate: 44%]
- [C45] *Venkatesha, V., *Nath, A., *Khebour, I., *Chelle, A., *Bradford, M., Tu, J., Pustejovsky, J., Blanchard, N., and §Krishnaswamy, N. (2024). Propositional Extraction from Natural Speech in Small Group Collaborative Tasks. In *International Conference on Educational Data Mining (EDM)*. International EDM Society. **[Acceptance rate: 26%] [A7]**
- [C44] *Mannan, S., *Hansen, P., Vimal, V. P., Davies, H. N., DiZio, P., and §Krishnaswamy, N. (2024). Combating Spatial Disorientation in a Dynamic Self-Stabilization Task Using AI Assistants. In *International Conference on Human-Agent Interaction (HAI)*. ACM. **[Acceptance rate: 36%] [A6]**
- [C43] Wei, H., Shakarian, P., Lebiere, C., Draper, B., Krishnaswamy, N., and Nirenburg, S. (2024). Metacognitive AI: Framework and the Case for a Neurosymbolic Approach. In *International Conference on Neural-Symbolic Learning and Reasoning (NeSy)*. Springer.
- [C42] *VanderHoeven, H., *Bradford, M., †Jung, C., *Khebour, I., Lai, K., Pustejovsky, J., Krishnaswamy, N., and Blanchard, N. (2024). Multimodal Design for Interactive Collaborative Problem-Solving Support. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C41] Zhu, Y., *VanderHoeven, H., Lai, K., *Bradford, M., Tam, C., *Khebour, I., Brutti, R., Krishnaswamy, N., and Pustejovsky, J. (2024). Modeling Theory of Mind in Multimodal HCI. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C40] *VanderHoeven, H., Blanchard, N., and §Krishnaswamy, N. (2024). Point Target Detection for Multimodal Communication. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C39] *Alalyani, N. and §Krishnaswamy, N. (2024). Multimodal Referring Expression Generation for Human-Computer Interaction. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C38] †Seefried, E., *Bradford, M., Aich, S., Siebert, C., Krishnaswamy, N., and Blanchard, N. (2024). Learning Foreign Language Vocabulary Through Task-Based Virtual Reality Immersion. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C37] *Ghaffari, S. and §Krishnaswamy, N. (2024). Exploring Failure Cases in Multimodal Reasoning About Physical Dynamics. In *AAAI Spring Symposium: Empowering Machine Learning and Large Language Models with Domain and Commonsense Knowledge (MAKE)*. AAAI.
- [C36] *Mannan, S., Vimal, V. P., DiZio, P., and §Krishnaswamy, N. (2024). Embodying Human-Like Modes of Balance Control Through Human-in-the-Loop Dyadic Learning. In *AAAI Spring Symposium: Symposium on Human-Like Learning (HLL)*. AAAI.
- [C35] *Bradford, M., †Seefried, E., Krishnaswamy, N., and Blanchard, N. (2024). Thematic Analysis of Foreign Language Learning in a Virtual Environment. In *CyberPsychology,*

CyberTherapy & Social Networking Conference (CYPST). Mary Ann Liebert, Inc.

- 2023
[C34] *Nath, A., *Mannan, S., and §Krishnaswamy, N. (2023). AxomiyaBERTa: A Phonologically-aware Transformer Model for Assamese. In *Findings of the Association for Computational Linguistics: ACL 2023 (Findings of ACL)*. ACL. **[Acceptance rate: 18%]**
- [C33] †Ahmed, S. R., *Nath, A., Martin, J. H., and §Krishnaswamy, N. (2023). 2^n is better than n^2 : Decomposing Event Coreference Resolution into Two Tractable Problems. In *Findings of the Association for Computational Linguistics: ACL 2023 (Findings of ACL)*. ACL. **[Acceptance rate: 18%]**
- [C32] *=Bradford, M., *=Khebour, I., Blanchard, N., and §Krishnaswamy, N. (2023). Automatic Detection of Collaborative States in Small Groups Using Multimodal Features. In *International Conference on Artificial Intelligence in Education (AIED)*. International AIED Society. **[Acceptance rate: 21%]**
- [C31] *VanderHoeven, H., Blanchard, N., and §Krishnaswamy, N. (2023). Robust Motion Recognition using Gesture Phase Annotation. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C30] †Kandoi, C., †Jung, C., *=Mannan, S., *VanderHoeven, H., †Meisman, Q., Krishnaswamy, N., and Blanchard, N. (2023). Intentional Microgesture Recognition for Extended Human-Computer Interaction. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C29] *Ghaffari, S. and §Krishnaswamy, N. (2023). Grounding and Distinguishing Conceptual Vocabulary Through Similarity Learning in Embodied Simulations. In *International Conference on Computational Semantics (IWCS)*. ACL. [Acceptance rate: 60%]
- [C28] =Nirenburg, S., =Krishnaswamy, N., and =McShane, M. (2023). Hybrid Machine Learning/Knowledge Base Systems Learning through Natural Language Dialog with Deep Learning Models. In *AAAI Spring Symposium: Challenges Requiring the Combination of Machine Learning and Knowledge Engineering (MAKE)*. AAAI.
- 2022
[C27] *=Nath, A., †Mahdipour Saravani, S., *Khebour, I., *Mannan, S., †Li, Z., and §Krishnaswamy, N. (2022). A Generalized Method for Automated Multilingual Loanword Detection. In *International Conference on Computational Linguistics (COLING)*. ACL. **[Acceptance rate: 33%]**
- [C26] *Mannan, S. and §Krishnaswamy, N. (2022). Where am I and where should I go? Grounding positional and directional labels in a disoriented human balancing task. In *Conference on (Dis)embodiment*. ACL.
- [C25] †Krishnaswamy, N., †Pickard, W., *Cates, B., Blanchard, N., and Pustejovsky, J. (2022). The VoxWorld Platform for Multimodal Embodied Agents. In *International Conference on Language Resources and Evaluation (LREC)*. ACL. [Acceptance rate: 61%]
- [C24] *Ghaffari, S. and §Krishnaswamy, N. (2022). Detecting and Accommodating Novel Types and Concepts in an Embodied Simulation Environment. In *Annual Conference on Advances in Cognitive Systems (ACS)*. Cognitive Systems Foundation.
- [C23] *Bradford, M., *Hansen, P., Beveridge, R., Krishnaswamy, N., and Blanchard, N. (2022). A deep dive into microphones for recording collaborative group work. In *International Conference on Educational Data Mining (EDM)*. International EDM Society.

- [C22] Pustejovsky, J. and Krishnaswamy, N. (2022). Multimodal Semantics for Affordances and Actions. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%] [A4]**
- 2021
[C21] Pustejovsky, J. and Krishnaswamy, N. (2021). The Role of Embodiment and Simulation in Evaluating HCI: Theory and Framework. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C20] ‡Krishnaswamy, N. and Pustejovsky, J. (2021). The Role of Embodiment and Simulation in Evaluating HCI: Experiments and Evaluation. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- 2020
[C19] ‡Krishnaswamy, N. and Pustejovsky, J. (2020). Neurosymbolic AI for Situated Language Understanding. In *Annual Conference on Advances in Cognitive Systems (ACS)*. Cognitive Systems Foundation. [Acceptance rate: 41%]
- [C18] ‡Krishnaswamy, N. and Pustejovsky, J. (2020). A Formal Analysis of Multimodal Referring Expressions Under Common Ground. In *International Conference on Language Resources and Evaluation (LREC)*. ACL. [Acceptance rate: 60%]
- [C17] ‡Krishnaswamy, N., Narayana, P., Bangar, R., Rim, K., Patil, D., McNeely-White, D. G., Ruiz, J., Draper, B., Beveridge, R., and Pustejovsky, J. (2020). Diana’s World: A Situated Multimodal Interactive Agent. In *AAAI Conference on Artificial Intelligence (AAAI): Demos Program*. AAAI.
- [C16] ‡Krishnaswamy, N., Beveridge, R., Pustejovsky, J., Patil, D., McNeely-White, D. G., Wang, H., and Ortega, F. R. (2020). Situational Awareness in Human Computer Interaction: Diana’s World. In *International Conference on Artificial Reality and Telexistence & Eurographics Symposium on Virtual Environments (ICAT-EGVE): Demos*. ACM/Eurographics. **[A2]**
- [C15] Pustejovsky, J. and Krishnaswamy, N. (2020). Embodied Human-Computer Interactions through Situated Grounding. In *International Conference on Intelligent Virtual Agents (IVA)*. ACM. **[Acceptance rate: 26%]**
- [C14] †Hutchens, M., Krishnaswamy, N., Cochran, B., and Pustejovsky, J. (2020). Jarvis: A Multimodal Visualization Tool for Bioinformatic Data. In *International Conference on Human-Computer Interaction (HCII)*. Springer. **[Avg. acceptance rate: 29%]**
- [C13] †Krajovic, K., Krishnaswamy, N., Dimick, N. J., Salas, R. P., and Pustejovsky, J. (2020). Situated Multimodal Control of a Mobile Robot: Navigation through a Virtual Environment. In *Special Session on Situated Dialogue with Virtual Agents and Robots (RoboDIAL): Late-Breaking Papers*. Non-archival.
- 2019
[C12] ‡Krishnaswamy, N., Friedman, S., and Pustejovsky, J. (2019). Combining Deep Learning and Qualitative Spatial Reasoning to Learn Complex Structures from Sparse Examples with Noise. In *AAAI Conference on Artificial Intelligence (AAAI)*. AAAI. **[Acceptance rate: 16%]**
- [C11] ‡Krishnaswamy, N. and Pustejovsky, J. (2019). Generating a Novel Dataset of Multimodal Referring Expressions. In *International Conference on Computational Semantics (IWCS)*. ACL. [Acceptance rate: 43%]
- [C10] McNeely-White, D., Ortega, F., Beveridge, R., Draper, B., Bangar, R., Patil, D., , Puste-

- jovsky, J., Krishnaswamy, N., Rim, K., Ruiz, J., and Wang, I. (2019). User-Aware Shared Perception for Embodied Agents. In *International Conference on Humanized Computing and Communication (HCC)*. IEEE.
- 2018
[C9] Narayana, P., Krishnaswamy, N., Wang, I., Bangar, R., Patil, D., Mulay, G., Rim, K., Beveridge, R., Ruiz, J., Pustejovsky, J., and Draper, B. (2018). Cooperating with Avatars Through Gesture, Language and Action. In *Intelligent Systems Conference (IntelliSys)*. IEEE. **[Acceptance rate: 34%]**
- [C8] [†]Krishnaswamy, N. and Pustejovsky, J. (2018). An Evaluation Framework for Multi-modal Interaction. In *International Conference on Language Resources and Evaluation (LREC)*. ACL. [Acceptance rate: 65%]
- [C7] Do, T., Krishnaswamy, N., Rim, K., and Pustejovsky, J. (2018). Multimodal Interactive Learning of Primitive Actions. In *AAAI Fall Symposium: Artificial Intelligence for Human-Robot Interaction*. AAAI.
- [C6] Do, T., Krishnaswamy, N., and Pustejovsky, J. (2018). Teaching Virtual Agents to Perform Complex Spatial-Temporal Activities. In *AAAI Spring Symposium: Integrating Representation, Reasoning, Learning, and Execution for Goal Directed Autonomy*. AAAI.
- 2017
[C5] [†]Krishnaswamy, N., Narayana, P., Wang, I., Rim, K., Bangar, R., Patil, D., Mulay, G., Ruiz, J., Beveridge, R., Draper, B., and Pustejovsky, J. (2017). Communicating and Acting: Understanding Gesture in Simulation Semantics. In *International Conference on Computational Semantics (IWCS)*. ACL. [Acceptance rate: 53%]
- [C4] Pustejovsky, J., Krishnaswamy, N., and Do, T. (2017). Object Embodiment in a Multi-modal Simulation. In *AAAI Spring Symposium: Interactive Multisensory Object Perception for Embodied Agents*. AAAI.
- 2016
[C3] [†]Krishnaswamy, N. and Pustejovsky, J. (2016). VoxSim: A Visual Platform for Modeling Motion Language. In *International Conference on Computational Linguistics (COLING): Technical Papers*. ACL. **[Acceptance rate: 32%]**
- [C2] Pustejovsky, J. and Krishnaswamy, N. (2016). Visualizing Events: Simulating Meaning in Language. In *Annual Meeting of the Cognitive Science Society (CogSci)*. Cognitive Science Society.
- [C1] Pustejovsky, J. and Krishnaswamy, N. (2016). VoxML: A Visualization Modeling Language. In *International Conference on Language Resources and Evaluation (LREC)*. ACL. [Acceptance rate: 60%]

Refereed Workshop Proceedings

- 2023
[W22] [†]Ahmed, S. R., ^{*}Nath, A., Regan, M., Pollins, A., Krishnaswamy, N., and Martin, J. H. (2023). How Good is the Model in Model-in-the-loop Event Coreference Resolution Annotation? In *Linguistic Annotation Workshop (LAW)*. ACL.
- [W21] Lee, K., Krishnaswamy, N., and Pustejovsky, J. (2023). An Abstract Specification of VoxML as an Annotation Language. In *International Workshop on Semantic Annotation (ISA)*. ACL.
- [W20] [†]Terpstra, C., ^{*}Khebour, I., ^{*}Bradford, M., [†]Wisniewski, B., Krishnaswamy, N., and Blanchard, N. (2023). How Good is Automatic Segmentation as a Multimodal Dis-

- course Annotation Aid? In *International Workshop on Semantic Annotation (ISA)*. ACL.
- [W19] *Alalyani, N. and §Krishnaswamy, N. (2023). A Methodology for Evaluating Multimodal Referring Expression Generation for Embodied Virtual Agents. In *Workshop on Generation and Evaluation of Non-Verbal Behaviour for Embodied Agents (GENEA)*. ACM.
- [W18] Dey, I., Puntambekar, S., Li, R., Gengler, D., Dickler, R., Hirshfield, L. M., Clevenger, C., Rose, S., *Bradford, M., and Krishnaswamy, N. (2023). The NICE framework: Analyzing Students’ Nonverbal Interactions During Collaborative Learning. In *Interactive Workshop: Collaboration Analytics*. Society for Learning Analytics Research.
- 2022
[W17] *Nath, A., †Ghosh, R., and §Krishnaswamy, N. (2022). Phonetic, Semantic, and Articulatory Features in Assamese-Bengali Cognate Detection. In *Workshop on NLP for Similar Languages, Varieties, and Dialects (VarDial)*. ACL. [Acceptance rate: 54%]
- [W16] *Tomar, A. and §Krishnaswamy, N. (2022). Exploring Correspondences Between Gibsonian and Telic Affordances for Object Grasping. In *Workshop on Annotation, Recognition and Evaluation of Actions (AREA)*. ACL.
- [W15] *Bradford, M., †Hansen, P., Lai, K., Brutti, R., Dickler, R., Hirshfield, L. M., Pustejovsky, J., Blanchard, N., and §Krishnaswamy, N. (2022). Challenges and Opportunities in Annotating a Multimodal Collaborative Problem Solving Task. In *Interdisciplinary Approaches to Getting AI Experts and Education Stakeholders Talking Workshop (Bridging AIEd)*. International AIEd Society.
- [W14] †Castillon, I., †Venkatesha, V., *VanderHoeven, H., *Bradford, M., Krishnaswamy, N., and Blanchard, N. (2022). Multimodal Features for Group Dynamic-Aware Agents. In *Interdisciplinary Approaches to Getting AI Experts and Education Stakeholders Talking Workshop (Bridging AIEd)*. International AIEd Society.
- 2021
[W13] †Krishnaswamy, N. and *Alalyani, N. (2021). Embodied Multimodal Agents to Bridge the Understanding Gap. In *Workshop on Bridging Human-Computer Interaction and Natural Language Processing (HCI+NLP)*. ACL.
- 2020
[W12] Pustejovsky, J., Krishnaswamy, N., Beveridge, R., Ortega, F. R., Patil, D., Wang, H., and McNeely-White, D. G. (2020). Interpreting and Generating Gestures with Embodied Human-Computer Interactions. In *Workshop on Generation and Evaluation of Non-Verbal Behaviour for Embodied Agents (GENEA)*. ACM.
- 2019
[W11] †Krishnaswamy, N. and Pustejovsky, J. (2019). Situated Grounding Facilitates Multimodal Concept Learning for AI. In *Visually Grounded Interaction and Language Workshop (ViGIL)*. Neural Information Processing Systems Foundation.
- [W10] †Krishnaswamy, N. and Pustejovsky, J. (2019). Multimodal Continuation-style Architectures for Human-Robot Interaction. In *Workshop on Cognitive Vision: Integrated Vision and AI for Embodied Perception and Interaction*. Cognitive Systems Foundation.
- [W9] Pustejovsky, J. and Krishnaswamy, N. (2019). Situational Grounding within Multimodal Simulations. In *AAAI Workshop on Games and Simulations in AI (GameSim)*. AAAI.
- 2018
[W8] †Krishnaswamy, N., Do, T., and Pustejovsky, J. (2018). Learning Actions from Events Using Agent Motions. In *Workshop on Annotation, Recognition and Evaluation of Actions (AREA)*. ACL.
- [W7] Pustejovsky, J. and Krishnaswamy, N. (2018). The Role of Event Simulation in Spa-

- tial Cognition. In *Workshop on Models and Representations in Spatial Cognition (MRSC)*. Springer.
- [W6] Pustejovsky, J. and Krishnaswamy, N. (2018). Every Object Tells a Story. In *Workshop on Events and Stories in the News (EventStory)*. ACL.
- 2017
[W5] ‡Krishnaswamy, N. and Pustejovsky, J. (2017). Do You See What I See? Effects of POV on Spatial Relation Specifications. In *International Workshop on Qualitative Reasoning (QR)*. AAAI/International Joint Conferences on Artificial Intelligence.
- [W4] Pustejovsky, J., Krishnaswamy, N., Draper, B., Narayana, P., and Bangar, R. (2017). Creating Common Ground Through Multimodal Simulations. In *Workshop on Foundations of Situated and Multimodal Communication (FSMC)*. ACL.
- 2016
[W3] Pustejovsky, J., Krishnaswamy, N., Do, T., and Kehat, G. (2016). The Development of Multimodal Lexical Resources. In *Workshop on Grammar and the Lexicon (GramLex)*. ACL.
- [W2] Do, T., Krishnaswamy, N., and Pustejovsky, J. (2016). ECAT: Event Capture Annotation Tool. In *International Workshop on Semantic Annotation (ISA)*. ACL.
- 2014
[W1] Pustejovsky, J. and Krishnaswamy, N. (2014). Generating Simulations of Motion Events from Verbal Descriptions. In *Lexical and Computational Semantics (*SEM)*. ACL.

Refereed Conference Presentations

Refereed conference submissions accepted for presentation with no accompanying proceedings, or with a published abstract only.

- 2024
[P7] Li, T., Jing, M., Makhani, Z., Oved, I., Krishnaswamy, N., Pustejovsky, J., and Hartshorne, J. K. (2024). Computational Thought Experiments for a More Rigorous Philosophy and Science of the Mind. In *Poster presented at Annual Meeting of the Cognitive Science Society (CogSci)*. Cognitive Science Society.
- 2023
[P6] DiZio, P., Krishnaswamy, N., *Mannan, S., and *Hansen, P. (2023). Manual balancing of a visual inverted pendulum by quantized versus proportional joystick commands. In *Poster presented at Neuroscience*. Society for Neuroscience.
- [P5] =Krishnaswamy, N., =Oved, I., =Hartshorne, J. K., and =Pustejovsky, J. (2023). Meaning to Mean: A Precondition for Sentience and Understanding in Large Language Models. In *The Science of Consciousness (TSC)*. Center for Consciousness Studies.
- [P4] Oved, I., Montemayor, C., Krishnaswamy, N., Pustejovsky, J., and Hartshorne, J. K. (2023). The View from Outside the Matrix: Doing Philosophy of Mind and Cognitive Science with Virtual Worlds. In *The Science of Consciousness (TSC)*. Center for Consciousness Studies.
- [P3] Weatherley, J., Dickler, R., Foltz, P. W., Srinivas, A., Pugh, S., Krishnaswamy, N., Whitehill, J., Bodzianowski, M., Perkoff, M., Southwell, R., Bush, J., Chang, M., Hirshfield, L. M., Showers, D., Ganesh, A., Li, Z., †Danilyuk, E., He, X., *Khebour, I., Dey, I., and D'Mello, S. K. (2023). The iSAT Collaboration Analytics Pipeline. In *International Learning Analytics and Knowledge Conference (LAK)*. Society for Learning Analytics Research.

- 2022 [P2] Dickler, R., Foltz, P. W., Krishnaswamy, N., Whitehill, J., Weatherly, J., Bodzianowski, M., Perkoff, M., Southwell, R., Pugh, S., Bush, J., Chang, M., Hirshfield, L. M., Showers, D., Ganesh, A., Li, Z., [†]Danilyuk, E., He, X., ^{*}Khebour, I., Dey, I., Puntambekar, S., and D'Mello, S. K. (2022). iSAT speech-based AI display for small group collaboration in classrooms. In *Interactive event at International Conference on Artificial Intelligence in Education (AIED)*. International AIED Society. **[A3]**
- [Pr] [†]Krishnaswamy, N. and ^{*}Ghaffari, S. (2022). Exploiting Embodied Simulation to Detect Novel Object Classes Through Interaction. In *Poster presented at Annual Meeting of the Cognitive Science Society (CogSci)*. Cognitive Science Society.

2 Teaching

Teaching Experience

Term	Course	Enrollment	Audience
Spring 2025	CS345: Machine Learning Foundations and Practice	128 (100 in-person, 28 online)	Undergraduate
Fall 2024	CS542: Natural Language Processing	31 (23 in-person, 8 online)	Graduate
Spring 2024	CS445: Introduction to Machine Learning	85 (67 in-person, 18 online)	Undergraduate
Fall 2023	CS542: Natural Language Processing	31 (24 in-person, 7 online)	Graduate
Spring 2023	CS445: Introduction to Machine Learning	83 (58 in-person, 25 online)	Undergraduate
Fall 2022	CS542: Natural Language Processing	34 (17 in-person, 17 online)	Graduate
Spring 2022	CS445: Introduction to Machine Learning	86 (75 in-person, 11 online)	Undergraduate
Fall 2021	CS542: Natural Language Processing	30 (22 in-person, 8 online)	Graduate
Spring 2021	CS445: Introduction to Machine Learning	67 (55 in-person, 12 online)*	Undergraduate

*In Spring 2021, CS445 was taught all online due to the COVID-19 global pandemic. These numbers reflect enrollment in the officially-designated in-person (001) vs. online (801) sections.

Other Teaching Activities

- 2025 Instructor, Bridging Linguistic Theory and AI: Usage-Based Learning in Humans and Machines. Tutorial, International Conference on Computational Linguistics (COLING). Abu Dhabi, UAE. January, 2025.
- 2022 Instructor, Grounding Meaning Representation for Situated Reasoning. Tutorial, Meeting of the Asia-Pacific Chapter of the Association for Computational Linguistics and

International Joint Conference on Natural Language Processing (AAACL-IJCNLP). Taipei, ROC. November, 2022.

Instructor, Multimodal Semantics for Affordances and Actions. European Summer School in Logic, Language, and Information (ESSLLI). Galway, Ireland. August, 2022.

2018-2020 Staff tutor, Computational Linguistics Master’s program. Brandeis University.
 • Tutored MS students in depth on coursework in multiple courses, including COSI 114: Fundamentals of Computational Linguistics, and COSI 134: Statistical Approaches to Natural Language Processing.

2017 Instructor, Building Multimodal Simulations for Natural Language. Tutorial, Meeting of the European Chapter of the Association for Computational Linguistics (EACL). Valencia, Spain. April, 2017.

3 Advising/Supervision

Graduated Ph.D. Students

2024 [D3] Advisor. Manafi, S. (2024). *Smart Transfers: Challenges and Opportunities in Boosting Low-Resource Language Models with High-Resource Power*. PhD thesis, Colorado State University.

[D2] Advisor. Alalyani, N. H. (2024). *Embodied Multimodal Referring Expressions Generation*. PhD thesis, Colorado State University.

2022 [D1] Co-advisor. Patil, D. K. (2022). *Something is fishy!—How ambiguous language affects generalization of video action recognition networks*. PhD thesis, Colorado State University.

Graduated M.S.. Students

2024 [M11] Advisor. Chelle, A. (2024). *Insights from LLM-Generated Free-Text Rationales and Annotated Labels through Human Evaluation*. Master’s project, Colorado State University.

[M10] Co-advisor. VanderHoeven, H. G. (2024). *Robust Gesture Detection for Multimodal Problem Solving*. Master’s thesis, Colorado State University.

2023 [M9] Advisor. Tomar, A. (2023). *Exploring Correspondences Between Gibsonian and Telic Affordances for Object Grasping using 3D Geometry*. Master’s thesis, Colorado State University.

2022 [M8] Advisor. Nath, A. (2022). *Linear Mappings: Semantic Transfer from Transformer Models for Cognate Detection and Coreference Resolution*. Master’s thesis, Colorado State University.

[M7] Advisor. Garcia, J. S. (2022). *Applications of Topological Data Analysis to Natural Language Processing and Computer Vision*. Master’s thesis, Colorado State University.

[M6] Advisor. Patchava, R. S. (2022). *Evaluating Interchangeability of Face Feature Vectors*. Master’s project, Colorado State University.

[M5] Advisor. Pandya, K. A. (2022). *Qualitative Spatial Relation Representation with ML Embedding Spaces*. Master’s project, Colorado State University.

2021 [M4] Advisor. Mogullapalli, S. (2021). *Mapping Between Face Recognition Feature Vector from Various CNN Models*. Master’s project, Colorado State University.

- [M3] Advisor. Gaddam, S. (2021). *Exploring Embedding Spaces in Transformers by Mapping Feature Vectors*. Master’s project, Colorado State University.
- [M2] Advisor. Katragadda, M. (2021). *Distributed Training of 3D Object Recognition Using Point Clouds*. Master’s project, Colorado State University.
- 2018 Reader. Storozum, J. (2018). *Opposites Attract—Or Do They?: Investigating Negated Verbs in Distributional Semantic Space*. Master’s thesis, Brandeis University.

Current Ph.D. Students

Mariah Bradford (co-advised with N. Blanchard)
 Brittany Cates (co-advised with S. Sreedharan)
 Anju Gopinath
 Sadaf Ghaffari
 Ibrahim Khebour (co-advised with N. Blanchard)
 Sheikh Mannan
 Abhijnan Nath

Current M.S. Students

Tarun Varma Buddaraju
 Avyakta Chelle
 Sai Kiran Ganesh Kumar
 Videep Venkatesha

Current Undergraduate Mentees

Carlos Mabrey
 Austin Youngren

4 Academic Service

- 2025 Organizing committee, Second Workshop on Multimodal Semantic Representation (MMSR II). Düsseldorf, Germany.
- Area chair, Meeting of the Association for Computational Linguistics (ACL). Vienna, Austria.
- Area chair, Meeting of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT). Albuquerque, NM, USA.
- Program committee, International Conference on Machine Learning (ICML). Vancouver, BC, Canada.
- Program committee, International Conference on Learning Representations (ICLR). Singapore, Singapore.

Program committee, Meeting of the Cognitive Science Society (CogSci). San Francisco, CA, USA.

Program committee, Conference on Language Modeling (COLM). Montreal, QC, Canada.

Program committee, International Conference on Artificial Intelligence and Statistics (AISTATS). Mai Khao, Thailand.

Program board, International Conference on Human-Computer Interaction (HCII). Gothenburg, Sweden.

Program committee, Joint ACL-ISO Workshop on Interoperable Semantic Annotation (ISA). Düsseldorf, Germany.

On-call area chair for ACL Rolling Review (ACL, NAACL, EMNLP).

Journal reviews: *Journal of Autonomous Agents and Multi-Agent Systems*.

2024

Senior area chair: Multimodality, Cross-modality (including Sign Languages, Vision and Other Modalities), Multimodal Applications, Grounded Language Acquisition, and HRI, International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING). Turin, Italy.

Area chair, Conference on Empirical Methods in Natural Language Processing (EMNLP). Miami, FL, USA.

Program committee, International Conference on Machine Learning (ICML). Vienna, Austria.

Program committee, International Conference on Learning Representations (ICLR). Vienna, Austria.

Program committee, Meeting of the Cognitive Science Society (CogSci). Rotterdam, Netherlands.

Program committee, Conference on Language Modeling (COLM). Philadelphia, PA, USA.

Program committee, Conference on Multimodality and Interaction in Language Learning (MILLing). Gothenburg, Sweden.

Program committee, Joint ACL-ISO Workshop on Interoperable Semantic Annotation (ISA). Turin, Italy.

On-call area chair for ACL Rolling Review (ACL, NAACL, EMNLP).

Journal reviews: *Cognitive Systems Research*.

2023

Program committee, Meeting of the Association for Computational Linguistics (ACL). Toronto, ON, Canada.

Program committee, Conference on Neural Information Processing Systems (NeurIPS). New Orleans, LA, USA.

Program committee, International Conference on Computational Semantics (IWCS). Nancy, France.

Program committee, Meeting of the Cognitive Science Society (CogSci). Sydney, NSW, Australia.

Program committee, AAAI Conference on Artificial Intelligence (AAAI). Washington,

DC, USA.

Program committee, Conference on Learning from Small Data (LSD). Gothenburg, Sweden.

Program committee, Joint ACL-ISO Workshop on Interoperable Semantic Annotation (ISA). Nancy, France.

On-call reviewer for ACL Rolling Review (ACL, NAACL, EMNLP).

2022

Area chair: Multimodal NLP, Grounded Language Acquisition, and Human-Robot Interaction, International Conference on Computational Linguistics (COLING). Gyeongju, Korea.

Ethics board, International Conference on Computational Linguistics (COLING). Gyeongju, Korea.

Program committee: Dialogue and Interactive Systems and Speech and Multimodality Processing tracks, Meeting of the Asian Chapter of the Association for Computational Linguistics and International Joint Conference on Natural Language Processing (AACL-IJCNLP). Taipei, ROC.

Program committee, AAAI Conference on Artificial Intelligence (AAAI). Virtual meeting (Hosted: Vancouver, BC, Canada).

Program committee, Meeting of the Cognitive Science Society (CogSci). Toronto, ON, Canada.

Program committee, Conference on (Dis)embodiment. Gothenburg, Sweden.

Program committee, Workshop on Bridging Human-Computer Interaction and Natural Language Processing (HCI+NLP). Seattle, WA, USA.

Program committee, Workshop on Annotation, Recognition and Evaluation of Actions (AREA). Galway, Ireland.

On-call reviewer for ACL Rolling Review (ACL, NAACL, EMNLP).

Journal reviews: *Frontiers in Neurorobotics*, *Human-Computer Interaction*, *Artificial Intelligence Review*, *International Journal of Human-Computer Interaction*.

2021

Organizing committee, Beyond Language: Workshop on Multimodal Semantic Representation (MMSR). Virtual meeting (Hosted: Groningen, The Netherlands).

Program committee, Goal Reasoning Workshop (GRW). Virtual meeting (Hosted: Dayton, OH, USA).

Program committee, Conference on Reasoning in Interaction (ReInAct). Gothenburg, Sweden.

Program committee: Language Grounding to Vision, Robotics and Beyond track, Meeting of the Association for Computational Linguistics and International Joint Conference on Natural Language Processing (ACL-IJCNLP). Virtual meeting (Hosted: Bangkok, Thailand).

Program committee, International Conference on Computational Semantics (IWCS). Virtual meeting (Hosted: Groningen, The Netherlands).

Program committee, Meeting of the Cognitive Science Society (CogSci). Vienna, Austria.

Program committee: Language Grounding to Vision, Robotics and Beyond track, Meeting of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT). Virtual meeting (Hosted: Mexico City, Mexico).

Program committee: Language Grounding to Vision, Robotics and Beyond track, Meeting of the European Chapter of the Association for Computational Linguistics (EACL). Virtual meeting (Hosted: Kyiv, Ukraine).

Program committee, AAAI Conference on Artificial Intelligence (AAAI). Virtual meeting (Hosted: San Francisco, CA, USA).

Program committee, Joint ACL-ISO Workshop on Interoperable Semantic Annotation (ISA). Virtual meeting (Hosted: Groeningen, The Netherlands).

2020 Program committee, Meeting of the Asia-Pacific Chapter of the Association for Computational Linguistics and International Joint Conference on Natural Language Processing (AACL-ICJNLP). Virtual meeting (Hosted: Suzhou, China).

Program committee, Joint ACL-ISO Workshop on Interoperable Semantic Annotation (ISA).

Program committee, Language Grounding to Vision, Robotics and Beyond area, Conference on Empirical Methods in Natural Language Processing (EMNLP). Virtual meeting (Hosted: Punta Cana, Dominican Republic).

Program committee, Meeting of the Cognitive Science Society (CogSci). Virtual meeting (Hosted: Toronto, ON, Canada).

Program committee, Language Grounding to Vision, Robotics and Beyond area, Meeting of the Association for Computational Linguistics (ACL). Virtual meeting (Hosted: Seattle, WA, USA).

Program committee, AAAI Conference on Artificial Intelligence (AAAI). New York, NY, USA.

Program committee: Student session, Web Summer School on Logic, Language, and Information (WeSSLLI). Virtual meeting (Hosted: Waltham, MA, USA).

Program committee: Special session on Gestures and Natural Language Semantics: Investigations at the Interface at *Sinn und Bedeutung* (SuB25-Gestures). London, England, UK.

Journal Reviews: *IEEE Transactions on Cognitive and Developmental Systems*.

2019 Program committee: Speech, Vision, Robotics, Multimodal and Grounding area (long and short papers), Conference on Empirical Methods in Natural Language Processing and International Joint Conference on Natural Language Processing (EMNLP-IJCNLP). Hong Kong.

Program committee: Vision, Robotics, Multimodal, Grounding and Speech area, Meeting of the Association for Computational Linguistics (ACL). Florence, Italy.

Program committee, Meeting of the Cognitive Science Society (CogSci). Montréal, QC, Canada.

Program committee: Semantics area (long papers), Meeting of the North American Chapter of the Association for Computational Linguistics: Human Language Tech-

- nologies (NAACL-HLT). Minneapolis, MN, USA.
- 2018 Program committee, Workshop on Dialogue and Perception (DaP). Gothenburg, Sweden.
- Pre-submission mentor, Student Research Workshop, Meeting of the North American Chapter of the Association for Computational Linguistics (NAACL). New Orleans, LA, USA.
- Program committee, Workshop on Annotation, Recognition and Evaluation of Actions (AREA). Miyazaki, Japan.

Media Coverage

The Wall Street Journal, WNYW FOX 5 New York, *5280 Magazine*, *North Forty News*, WHYY's *The Pulse* (National Public Radio), CSU SOURCE Magazine.

Professional Membership

Association for Computational Linguistics (ACL), Association for the Advancement of Artificial Intelligence (AAAI), Linguistic Society of America (LSA), European Language Resource Association (ELRA).