SHRUTI PALASKAR

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🌐 shrutijpalaskar.github.io

RESEARCH INTERESTS

Multimodal Machine Learning, Speech Recognition, Natural Language Processing

EDUCATION

Carnegie Mellon University   2018 - May 2022 (Expected)
PhD Language Technologies, School of Computer Science   Advisors: Florian Metze, Alan W Black

Carnegie Mellon University   2016 - 2018
MS Language Technologies, School of Computer Science   Advisor: Florian Metze

Pune Institute of Computer Technology   2012 - 2016
BE Computer Engineering   *First Class with Distinction*

HONORS AND AWARDS

EECS Rising Stars   2020

Facebook Graduate Fellowship   2019-2021

Center for Machine Learning and Health Graduate Fellowship   2018-2019

CMU LTI Graduate Fellowship   2016-2018

Winning team of the 7th Dialog State Tracking Challenge Multimodal Track   AAAI 2019

INVITED TALKS

Temple University, Philadelphia, PA   February 2021
Multimodality: Learning from Speech, Vision, and Text

IBM, Yorktown Heights, NY   October 2019
Facebook, Menlo Park, CA   September 2019
Learning from Large-Scale Instructional Videos

University of Copenhagen, Denmark   July 2019
Amazon, Seattle, WA   March 2019
Learning Acoustic Word Embeddings

PUBLICATIONS

20. **Shruti Palaskar**, Florian Metze, Yonatan Bisk and Alan W Black, "Hierarchical Learning for Multimodal Language Generation", *In Preparation*

19. **Shruti Palaskar**, Ruslan Salakhutdinov, Alan W Black and Florian Metze, "Hierarchical Semantic Concepts for Multimodal Video Understanding", *The 22nd Annual Conference of the International Speech Communication Association (INTERSPEECH), 2021*

18. Amanda Duarte, **Shruti Palaskar**, Deepti Ghadiyaram, Kenneth DeHaan, Florian Metze, Jordi Torres, and Xavier Giro-i-Nieto, "How2Sign: A Large-scale Multimodal Dataset for Continuous American Sign Language", *Computer Vision and Pattern Recognition (CVPR), 2021*

17. Anirudh Mani*, **Shruti Palaskar***, NV Meripo, Sandeep Konam and Florian Metze, "ASR Error Correction and Domain Adaptation Using Machine Translation", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2020* **Oral Presentation**

16. **Shruti Palaskar***, Ramon Sanabria* and Florian Metze, "Transfer Learning for Multimodal Dialog", *Elsevier Computer Speech and Language (CS&L), 2020*

15. Lucia Specia, Raman Arora, Loic Barrault, Ozan Caglayan, Amanda Duarte, Desmond Elliott, Spandana Gella, Nils Holzenberger, Chiraag Lala, Sun Jae Lee, Jindrich Libovický, Pranava Madhyastha, Florian Metze, Karl Mulligan, Alissa Ostapenko, **Shruti Palaskar** ✉, Ramon Sanabria, Josiah Wang, "Grounded Sequence-to-Sequence Transduction", *IEEE Journal on Selected Topics in Signal Processing (JSTSP), 2020*

14. Odette Scharenborg, Laurent Besacier, Alan W Black, Mark Hasegawa-Johnson, Florian Metze, Graham Neubig, Sebastian Stüker, Pierre Godard, Markus Müller, Lucas Ondel, **Shruti Palaskar**, Philip Arthur, Francesco Ciannella, Mingxing Du, Erin Larsen, Danny Merkx, Rachid Riad, Liming Wang, Emmanuel Dupoux, "Speech Technology for Unwritten Languages", *IEEE Transactions on Audio, Speech and Language Processing (TASLP), 2020*

13. Anirudh Mani, **Shruti Palaskar**, and Sandeep Konam, "Towards understanding ASR error correction for medical conversations", *First Workshop on Natural Language Processing for Medical Conversations, 58th Annual Meeting of the Association for Computational Linguistics (ACL), 2020*

12. **Shruti Palaskar**, Jindrich Libovicky, Spandana Gella and Florian Metze, "Multimodal Abstractive Summarization of How2 Videos", *The 57th Annual Meeting of the Association for Computational Linguistics (ACL), 2019*

11. **Shruti Palaskar***, Vikas Raunak* and Florian Metze, "Learned in Speech Recognition: Contextual Acoustic Word Embeddings", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2019*

10. Nils Holzenberger*, **Shruti Palaskar***, Pranava Madhyastha, Raman Arora and Florian Metze, "Learning from Multiview Correlations in Open-Domain Videos", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2019*

9. Ozan Caglayan, Ramon Sanabria, **Shruti Palaskar**, Loic Barrault and Florian Metze, "Multimodal Grounding for Sequence-to-Sequence Speech Recognition", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2019*

8. Ramon Sanabria*, **Shruti Palaskar***, and Florian Metze, "CMU Sinbad's Submission to the DSTC7 AVSD Track", *Dialog State Tracking Challenge (DSTC) and Workshop, 33rd AAAI Conference on Artificial Intelligence (AAAI), 2019*
Oral Presentation

7. **Shruti Palaskar** and Florian Metze, "Acoustic-to-Word Recognition with Sequence-to-Sequence Models", *IEEE Workshop on Spoken Language Technology (SLT), 2018*

6. **Shruti Palaskar***, Ramon Sanabria*, Florian Metze, "End-to-End Multimodal Speech Recognition", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2018*

5. Odette Scharenborg, Laurent Besacier, Alan W Black, Mark Hasegawa-Johnson, Florian Metze, Graham Neubig, Sebastian Stüker, Pierre Godard, Markus Müller, Lucas Ondel, **Shruti Palaskar**, Philip Arthur, Francesco Ciannella, Mingxing Du, Erin Larsen, Danny Merkx, Rachid Riad, Liming Wang, Emmanuel Dupoux, "Linguistic Unit Discovery from Multimodal Inputs in Unwritten Languages", *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2018*

4. Jindrich Libovicky, **Shruti Palaskar**, Spandana Gella and Florian Metze, "Multimodal Abstractive Summarization for Open-Domain Videos", *Visually Grounded Interaction and Language (ViGIL), The Conference on Neural Information Processing Systems (NeurIPS), 2018* **Spotlight Presentation**

3. Ramon Sanabria, Ozan Caglayan, **Shruti Palaskar**, Desmond Elliot, Loic Barrault, Lucia Specia and Florian Metze, "How2: A Large-scale Dataset for Multimodal Language Understanding", *Visually Grounded Interaction and Language (ViGIL), The Conference on Neural Information Processing Systems (NeurIPS), 2018*

2. Odette Scharenborg, Francesco Ciannella, **Shruti Palaskar**, Alan Black, Florian Metze, Lucas Ondel, Mark Hasegawa-Johnson, "Building an ASR System for a Low-resource Language Through the Adaptation of a High-resource Language ASR System: Preliminary Results", *International Conference on Natural Language, Signal, and Speech Processing (ICNLSSP), 2017*

1. **Shruti Palaskar** and Florian Metze, "End-to-End Audio Visual Speech Recognition and Summarization", *Young Female Researchers in Speech Workshop (YFRSW), 18thAnnual Conference of the International Speech Communication Association (INTERSPEECH) 2017*

INTERNSHIPS

Allen Institute for AI (AI2)   May 2021 - Aug 2021
Research Intern   *Seattle, WA*

Facebook AI   May 2020 - Aug 2020
Research Intern   *Menlo Park, CA*

Abridge AI   May 2019 - Aug 2019
Research Intern   *Pittsburgh, PA*

Jelinek Memorial Workshop on Speech and Language Technology   June 2018 - Aug 2018
Graduate Student Participant at Johns Hopkins University   *Baltimore, MD*

Jelinek Memorial Workshop on Speech and Language Technology   June 2017 - Aug 2017
Graduate Student Participant at Carnegie Mellon University   *Pittsburgh, PA*

IIT Bombay   Sept 2015 - Dec 2015
Research Intern   *Mumbai, India*

MIT Media Lab REDX   May 2015 - July 2015
Innovation Engineer   *Mumbai, India*

TEACHING

Natural Language Processing 11-4/611   Spring 2020
Undergraduate and Graduate Course, CMU   *Head Teaching Assistant*

Speech Recognition and Understanding 11-751, 18-751   Fall 2018
Graduate Course, CMU   *Head Teaching Assistant*

Guest Lectures

1. "Multimodal ML", Natural Language Processing, CMU - *Spring 2020, Fall 2020* [Slides] [Video]

2. "End-to-End Speech Recognition", Speech Recognition and Understanding, CMU - *Fall 2018*

ACADEMIC SERVICE

Organization Services

1. Lead Organizer for SCS CMU's Graduate Applicant Support Program, 2020

2. ACL 2020 Socio-Cultural Diversity and Inclusion Committee Co-chair

3. ICML 2019 Workshop Co-Organizer The How2 Challenge and Workshop: New Tasks for Vision and Language

4. ICASSP 2020 Student Volunteer

5. NeurIPS 2020 ML4H Mentor - Providing continuous feedback and review on paper submission for junior researchers

Reviewing Services

1. Journal Reviewing: Transactions on Audio, Speech, and Language Processing 2020, Elsevier Computer Speech and Language 2020, 2019

2. Conference Reviewing: ICCV 2021, Interspeech 2021, ACM MM 2021, NeurIPS 2021, EACL 2021, ICLR 2021, EMNLP 2021, 2020, NAACL 2019, ICASSP 2019, ICML 2020

3. Workshop Reviewing: KDD Workshop on Humanitarian Mapping 2020, DSTC AAAI 2019, 2020; ML4H 2019, 2020; LTI SRS 2019

OUTREACH

Creative Technologies Nights, CMU
Introduce middle school girls to various technology-related topics in weekly presentations.

Take Our Daughters and Sons to Work, CMU
Present a roadshow about working in Computer Science to middle school children.

Young Female Researchers in Speech Workshop, Interspeech 2017, 2018
Participated and mentored students working in speech technologies.