

AMIR ZADEH

Carnegie Mellon University

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WORK AND PROFESSIONAL EXPERIENCE

Carnegie Mellon University Machine Learning Postdoctoral Associate Adviser: Louis-Philippe Morency	July 2021-present
University of Southern California Machine Learning Research Assistant Institute for Creative Technologies	2013-2015
University of Tehran Machine Learning and Robotics Research Assistant Advanced Robotics Lab	2011-2013
University of Tehran Director, Network Connectivity and Remote Learning Infrastructure ECE Department	2009-2013
University of Tehran Founder, Parallel Computation and Advanced Graphics Team ECE Department	2008

EDUCATION

Carnegie Mellon University Artificial Intelligence Ph.D. Language Technologies Institute School of Computer Science MultiComp Lab - Adviser: Louis-Philippe Morency Committee: Louis-Philippe Morency, Ruslan Salakhutdinov, Tom Mitchel, Ali Farhadi Yahoo! InMind Fellowship 2016	July 2021
University of Tehran Computer Engineering B.S. ECE Department Advanced Robotics Lab - Adviser: Hadi Moradi	July 2013
Alleme Helli Highschool of Exceptional Talents Main Branch - Tehran	May 2008

RESEARCH AREAS

Multimodal Machine Learning and Communication: *Theories, Fusion, Representation Learning*

Natural Language Processing: *Multimodal Language, Sentiment-Emotions-Personality Recognition*

PUBLICATIONS

22. “*Relay Stochastic Variational Inference*”, [Amir Zadeh](#), Santiago Benoit, Louis-Philippe Morency, NeurIPS 2021 (under review)
21. “*Variational Auto-Decoder: Neural Generative Modeling from Partial Data*”, [Amir Zadeh](#), Yao-Chong Lim, Paul Pu Liang, Louis-Philippe Morency, NeurIPS 2021 (under review)
20. “*MTAG: Modal-Temporal Attention Graph for Unaligned Human Multimodal Language Sequences*”, Jianing Yang, Yongxin Wang, Ruitao Yi, Yuying Zhu, Azaan Rehman, [Amir Zadeh](#), Soujanya Poria, Louis-Philippe Morency, NAACL 2021
19. “*Humor Knowledge Enriched Transformer for Understanding Multimodal Humor*”, Md Kamrul Hasan, Sangwu Lee, Wasifur Rahman, [Amir Zadeh](#), Rada Mihalcea, Louis-Philippe Morency, Ehsan Hoque, AAAI 2021
18. “*Foundations of Multimodal Co-learning*”, [Amir Zadeh](#), Paul Pu Liang, Louis-Philippe Morency, **Information Fusion Journal 2020 (Impact Factor 11.2)**
17. “*Multimodal Finetuning of Advanced Transformer Models*”, Wasifur Rahman, Md Kamrul Hasan, [Amir Zadeh](#), Louis-Philippe Morency, Mohammed Ehsan Hoque, **ACL 2020 (Oral)**
16. “*Factorized Multimodal Transformer for Multimodal Sequential Learning*”, [Amir Zadeh](#), Chengfeng Mao, Kelly Shi, Yiwei Zhang, Paul Pu Liang, Soujanya Poria, Louis-Philippe Morency, **Information Fusion Journal 2020 (Impact Factor 11.2), special edition on sentiment and affect**
15. “*Social-IQ: A Question-Answering Benchmark for Unconstrained Social Intelligence*”, [Amir Zadeh](#), Michael Chan, Paul Pu Liang, Edmund Tong, Louis-Philippe Morency, **CVPR 2019 (Oral)**
14. “*UR-FUNNY: A Multimodal Language Dataset for Understanding Humor*”, Md Kamrul Hasan, Wasifur Rahman, [Amir Zadeh](#), Jianyuan Zhong, Md Iftexhar Tanveer, Louis-Philippe Morency, Mohammed (Ehsan) Hoque, **EMNLP 2019**
13. “*Learning Factorized Multimodal Representation*”, Yao-Hung Hubert Tsai, Paul Pu Liang, [Amir Zadeh](#), Louis-Philippe Morency, Ruslan Salakhutdinov, **ICLR 2019**
12. “*Words Can Shift: Dynamically Adjusting Word Representations Using Nonverbal Behaviors*”, Yansen Wang, Ying Shen, Zhun Liu, Paul Pu Liang, [Amir Zadeh](#)[†], Louis-Philippe Morency, **AAAI 2019**
11. “*Multimodal Language Analysis in the Wild: CMU-MOSEI Dataset and Interpretable Dynamic Fusion Graph*”, [Amir Zadeh](#), Paul Pu Liang, Jonathan Vanbriesen, Soujanya Poria, Edmund Tong, Erik Cambria, Minghai Chen, Louis-Philippe Morency, **ACL 2018 (Oral)**
10. “*Memory Fusion Network for Multi-view Sequential Learning*”, [Amir Zadeh](#), Paul Pu Liang, Navonil Mazumder, Soujanya Poria, Erik Cambria, Louis-Philippe Morency, **AAAI 2018 (Oral)**
9. “*Efficient Low-rank Multimodal Fusion with Modality-Specific Factors*”, Zhun Liu, Ying Shen, Varun Bharadhwaj Lakshminarasimhan, Paul Pu Liang, [Amir Zadeh](#)[†], Louis-Philippe Morency, **ACL 2018 (Oral)**
8. “*Multimodal Language Analysis with Recurrent Multistage Fusion*”, Paul Pu Liang, Ziyin Liu, [Amir Zadeh](#)[†], Louis-Philippe Morency, **EMNLP 2018 (Oral)**

7. “*Conversational Memory Network for Emotion Recognition in Dyadic Dialogue Videos*”, Devamanyu Hazarika, Soujanya Poria, [Amir Zadeh](#)[†], Erik Cambria, Louis-Philippe Morency, Roger Zimmermann, **NAACL 2018**
6. “*Multi-attention Recurrent Network for Human Communication Comprehension*”, [Amir Zadeh](#), Paul Pu Liang, Soujanya Poria, Erik Cambria, Prateek Vij, Louis-Philippe Morency, **AAAI 2018 (Oral)**
5. “*OpenFace 2.0: Facial Behavior Analysis Toolkit*”, Tadas Baltruaitis, [Amir Zadeh](#), Yao-Chong Lim, Louis-Philippe Morency, **FG 2018 (Oral)**
4. “*Convolutional Experts Network for Facial Landmark Detection*”, [Amir Zadeh](#), Yao-Chong Lim, Tadas Baltruaitis, Louis-Philippe Morency, workshop, **CVPR 2017**
3. “*Combating Human Trafficking with Multimodal Deep Models*”, Edmund Tong*, [Amir Zadeh](#)*, Cara Jones, Louis-Philippe Morency, **ACL 2017**
2. “*Context-Dependent Sentiment Analysis in User-Generated Videos*”, Soujanya Poria, Erik Cambria, Devamanyu Hazarika, Navonil Mazumder, [Amir Zadeh](#)[†], Louis-Philippe Morency, **ACL 2017 (Oral)**
1. “*Tensor Fusion Network For Multimodal Sentiment Analysis*”, [Amir Zadeh](#)*, Minghai Chen*, Soujanya Poria, Erik Cambria, Louis-Philippe Morency, **EMNLP 2017 (Oral)**

PREPRINTS

2. “*Pseudo-Encoded Stochastic Variational Inference*”, [Amir Zadeh](#), Simon Hessner, Yao-Chong Lim, Louis-Philippe Morency
1. “*WildMix Dataset and Spectro-Temporal Transformer Model for Monoaural Audio Source Separation*”, [Amir Zadeh](#), Tianjun Ma, Soujanya Poria, Louis-Philippe Morency

INVITED TALKS

3. Invited Speaker, Workshop on Bridging Language and Vision, ICCV 2019 (was not able to attend)
2. Invited Speaker, University of Rochester ROHCI Lab, 2018
1. Invited Speaker, Google Workshop on Multimodal Learning, San Francisco, 2018

ORGANIZATION SERVICES

5. Organizer of The Third Workshop on Multimodal Language – Co-located with NAACL 2021.
4. Organizer of Second Grand-challenge and Workshop on Multimodal Language – Co-located with ACL 2020.
3. Organizer of Workshop on Multimodal Learning – Co-located with CVPR 2020.
2. Co-organizer of Workshop on Cross-Modal Learning – Co-located with ICCV 2019.
1. Organizer of First Grand-challenge and Workshop on Multimodal Language – Co-located with ACL 2018.

PROGRAM COMMITTEE EXPERIENCE

7. Association for Computational Linguistics (ACL)
6. Empirical Methods in Natural Language Processing (EMNLP)
5. Computer Vision and Pattern Recognition (CVPR)

4. Neural Information Processing Systems (NeurIPS)
3. Association for Advancements in Artificial Intelligence (AAAI)
2. International Conference on Learning Representations (ICLR)
1. International Conference on Multimodal Interaction (ICMI)

TEACHING SERVICES

3. Guest lecturer: Advanced Multimodal Machine Learning 11777, CMU, Fall 2018
2. Guest lecturer: Advanced Multimodal Machine Learning 11777, CMU, Fall 2017
1. Head Teaching Assistant: Introduction to Artificial Intelligence, University of Tehran, Fall and Spring 2011, 2012, 2013.

CO-ADVISED STUDENTS AT CMU

Chengfeng Mao, Masters in CS	Jed Yang, Masters in ML
Yao-Chong Lim, Masters in CS	Paul Pu Liang, Masters in ML
Tejas Srinivasan, Masters in LT	Vivek Pandit, Masters in CDS
Amala Deshmukh, Masters in CS	Justin Cao, Masters in ML
Richard Wang, Masters in CV	Justin Cao, Masters in ML
Vedant Sanil, Masters in ECE	Kelly Shi, Masters in CS
Zhun Liu, Masters in IIS	Anurag Katakhar, Masters in CDS
Abhishek Sawarkar, Masters in ECE	Harsh Lara, Masters in CDS
Irene Li, Masters in ML	Tianjun Ma, Masters in CS
Minghai Chen, Masters in Cs	Ying Shen, Masters in IIS
Varun Lakshminarasimhan, Masters in IIS	Holmes Wu, Undergraduate CS