

## AI + X

1. *A Preliminary Study Investigating Users' Perception of Artificial Intelligence*, Heejin Jeong (U-M), Olga V. Bitkina (Incheon National U.), Byung Cheol Lee (Texas A&M U., Corpus Christi), Jangwoon Park (Texas A&M Univ., Corpus Christi), Jaehyun Park (Incheon National U.), and Hyun K. Kim (Kwangwoon U.)
2. *Building and Validating Hierarchical Lexicons with a Case Study on Personal Values*, Steven Wilson, Yiting Shen, Rada Mihalcea (U-M, CSE)
3. *Creating Interactive User Interfaces by Demonstration using Crowdsourcing*, Rebecca Krosnick (U-M, CSE), Steve Oney (U-M, SI), Walter Lasecki (U-M, CSE)
4. *Debiasing Representations by Removing Unwanted Variation Due to Protected Attributes*, Amanda Bower (U-M, ECE), Laura Niss (U-M, LSA), Yuekai Sun (U-M, LSA), Alexander Vargo (U-M, LSA)
5. *DeepWrangler: Neural-Guided Program Synthesis for Language-Neutral Data Transformations*, Zhongjun Jin, Ishan Patney, Haozhu Wang, Michael R. Anderson, Michael Cafarella, H. V. Jagadish (U-M, CSE)
6. *Realistic Adversarial Examples in 3D Meshes*, Chaowei Xiao, Dawei Yang, Bo Li, Jia Deng, Mingyan Liu (U-M, CSE)
7. *Tiresias: A GPU Cluster Manager for Distributed Deep Learning*, Juncheng Gu, Mosharaf Chowdhur, Kang G. Shin (U-M, CSE)

## CORE AI

8. *An Architecture Approach to Modeling the Remote Associates Test*, Jule Schatz, Steven Jones, John Laird (U-M, CSE)
9. *Developing Technology to Improve Schedule Planning and Decision Making for Adolescents and Young Adults with Disabilities*, Lynn Garrett, Ed Durfee (U-M, CSE)
10. *Efficient Computation of Spreading Activation Using Lazy Evaluation*, Steven J. Jones, Arthur R. Wandzel, John E. Laird (U-M, CSE)
11. *Interactively Learning a Blend of Goal-Based and Procedural Tasks*, Aaron Mininger, John E. Laird (U-M, CSE)
12. *Learning to Communicate and Solve Visual Blocks-World Tasks*, Qi Zhang, Richard Lewis, Satinder Singh, Edmund Durfee, John E. Laird (U-M, CSE)
13. *Minimax-Regret Querying on Side Effects for Safe Optimality in Factored Markov Decision Processes*, Shun Zhang Edmund H. Durfee, Satinder Singh (U-M, CSE)

## ROBOTICS

14. *Bio-LSTM: A Biomechanically Inspired Recurrent Neural Network for 3D Pedestrian Pose and Gait Prediction*, Xiaoxiao Du (U-M)
15. *Factored Pose Estimation of Articulated Objects using Efficient Nonparametric Belief Propagation*, Karthik Desingh (U-M, CSE), Shiyang Lu (U-M, Robotics), Anthony Opirari (U-M, CSE), Odest Chadwicke Jenkins (U-M, CSE & Robotics)

## MACHINE LEARNING MODELS

16. *A Deep Learning Approach for the Investigation of Functional Connectivity Dynamics in Resting State fMRI*, Marlena Duda (U-M, Dept. of Computational Medicine & Bioinformatics), Jiong Zhu (U-M, CSE), Yujun Yan (U-M, CSE), Danai Koutra (U-M, CSE), Chandra Sripada (U-M, Dept. of Psychiatry & Philosophy)

17. *A Learning and Masking Approach to Secure Learning*, Linh Nguyen, Sky Wang, Arunesh Sinha (U-M, CSE)

18. *Comparing Deep and Shallow Techniques for Building Risk Stratification Models using EHR Data*, Shengpu Tang (U-M, CSE), Parmida Davarmanesh (U-M), Yanmeng Song (U-M), Gabriel Kralik (Santa Clara Univ.), Conrad Gordon (Northwestern Univ.), Michael Sjoding MD MSc (Internal Medicine UM), Danai Koutra PhD (U-M, CSE), Jenna Wiens PhD (U-M, CSE)

19. *EDGE: Scalable Hash-Based Estimator of Mutual Information*, Morteza Noshad, Yu Zeng, Alfred O. Hero III (U-M, CSE)

20. *Extractive Adversarial Networks: High-Recall Explanations for Identifying Personal Attacks in Social Media Posts*, Samuel Carton, Qiaozhu Mei, Paul Resnick (U-M, SI)

21. *Floyd-Warshall Reinforcement Learning: Learning from Past Experiences to Reach New Goals*, Vikas Dhiman (U-M, ECE), Shurjo Banerjee (U-M, ECE), Jeffrey M. Siskind (Purdue U.), and Jason Corso (U-M, CSE)

22. *Modeling Task Relationships in Multi-task Learning with Multi-gate Mixture-of-Experts*, Jiaqi Ma (U-M, SI), Zhe Zhao (Google), Xinyang Yi (Google), Jilin Chen (Google), Lichan Hong (Google), Ed H. Chi (Google)

23. *Salus: Fine-Grained GPU Sharing Primitives for Deep Learning Applications*, Peifeng Yu, Mosharaf Chowdhury (U-M, CSE)

## COMPUTER VISION

24. *AI at the Edge With Mythic*, David Fick, Michael Henry, Skylar Skrzyniarz, David Thorsley (Mythic AI)

25. *End-to-End Dense Video Captioning with Masked Transformer*, Luowei Zhou (U-M), Yingbo Zhou (Salesforce), Jason Corso (U-M, CSE), Richard Socher (Salesforce), Caiming Xiong (Salesforce)

26. *Extracting Physiological Measurements from Thermal Images*, Christian Hessler (U-M, Dearborn), Mohamed Abouelenien (U-M, Dearborn), Mihai Burzo (U-M, Flint)

27. *Robust Physical-World Attacks on Deep Learning Visual Classifiers*, Kevin Eykholt and Atul Prakash (U-M, CSE)

28. *Video Understanding as a Service*, Jason Corso (Voxel51, U-M, CSE), Brian Moore (Voxel51)

29. *Weakly-Supervised Video Object Grounding from Text by Loss Weighting and Object Interaction*, Luowei Zhou, Nathan Louis, Jason Corso (U-M, CSE)

## SPEECH AND LANGUAGE

30. *Analyzing the Quality of Counseling Conversations: The Tell-tale Signs of High-quality Counseling*, Veronica Perez-Rosas (U-M, CSE), Xuotong Sun (U-M, CSE), Christy Li (U-M, CSE), Yuchen Wang (U-M, CSE), Kenneth Resnicow (U-M, SPH), Rada Mihalcea (U-M, CSE)
31. *Automatic Detection of Fake News*, Veronica Perez-Rosas (U-M, CSE), Bennett Kleinberg (U. of Amsterdam, Dept. of Psychology), Alexandra Lefevre (U-M, CSE), Rada Mihalcea (U-M, CSE)
32. *Classification of Huntington Disease Using Acoustic and Lexical Features*, Matthew Perez, Wenyu Jin, Duc Le, Noelle Carlozzi, Praveen Dayalu, Angela Roberts, Emily Mower Provost (U-M, CSE)
33. *Culturally Biased Word Embeddings: Do Word Embeddings "Think" More Like an Indian Male or an American Female?* Anamaria Cuza, Steven Wilson (U-M, CSE)
34. *Factors Influencing the Surprising Instability of Word Embeddings*, Laura Wendlandt, Jonathan K. Kummerfeld, Rada Mihalcea (U-M, CSE)
35. *Grounding Language for Interactive Task Learning*, Peter Lindes, James Kirk, Aaron Mininger, John Laird (U-M, CSE)
36. *Improving Cross-Corpus Speech Emotion Recognition with Adversarial Discriminative Domain Generalization (ADDoG)*, John Gideon (U-M, CSE), Melvin McInnis (U-M, Psychiatry), Emily Mower Provost (U-M, CSE)
37. *Improving End-of-Turn Detection in Spoken Dialogues by Detecting Speaker Intentions as a Secondary Task*, Zakaria Aldeneh (U-M, CSE), Dimitrios Dimitriadis (Microsoft), Emily Mower Provost (U-M, CSE)
38. *Interpretable Multimodal Deception Detection in Videos*, Hamid Karimi, Jiliang Tang (Michigan State U.)
39. *Learning End-to-End Goal-Oriented Dialog with Multiple Answers*, Janarthanan Rajendran (U-M, CSE), Jatin Ganhotra (IBM Research), Satinder Singh (U-M, CSE), Lazaros Polymenakos (IBM Research)
40. *Learning from Personal Longitudinal Dialog Data*, Charles Welch, Jonathan K. Kummerfeld, Veronica Perez-Rosas, Rada Mihalcea (U-M, CSE)
41. *Mood State Prediction for Individuals with Bipolar Disorder*, Katie Matton, Emily Mower Provost (U-M, CSE)
42. *Predicting Human Activities from User-Generated Text*, Steven Wilson, Rada Mihalcea (U-M, CSE)
43. *Relating Human Activities with Phrasal Embeddings*, Li Zhang, Steven Wilson, Rada Mihalcea (U-M, CSE)
44. *Speaker Naming in Movies*, Mahmoud Azab, Mingzhe Wang, Max Smith, Noriyuki Kojima, Jia Deng, Rada Mihalcea (U-M, CSE)