

Natural Language, Dialog and Speech (NDS) Symposium

November 22, 2019 | www.nyas.org/NDS2019

POSTER TITLES AND PRESENTERS

1. *B. Rex: A Dialogue Agent for Book Recommendations*

Mitchell Abrams, M.S.¹, Luke Gessler¹, Matthew Marge²; Georgetown University¹, Information Science Division U.S. Army Research Laboratory²

2. *Named Entity Recognition Systems for English Mostly Learn Names, not Contexts*

Oshin Agarwal, Yinfei Yang, Byron Wallace, Ani Nenkova; Google, AI Northeastern University, University of Pennsylvania

3. *Comparing Cross Language Relevance vs Deep Neural Network approaches to corpus-based End-to-end dialogue systems*

Seyed Hossein Alavi, PhD, Anton Leuski, Research Professor at USC, David Traum, Research Professor at USC Institute for Creative Technologies, USC

4. *Using a Spoken Dialogue System to Document Endangered Languages*

Seyed Hossein Alavi, PhD, Jacqueline Brixey, Ph.D. student, David Traum, Research Professor at USC Institute for Creative Technologies, USC

5. *Drug Repurposing for Cancer: An NLP Approach to Identify Low-Cost Therapies*

Ioana Baldini, PhD¹, Shivashankar Subramanian, MS^{1,2}, Sushma Ravichandran, MS¹, Dmitriy A. Katz-Rogozhnikov, PhD¹, Karthikeyan Natesan Ramamurthy, PhD¹, Prasanna Sattigeri, PhD¹, Kush R. Varshney, PhD¹, Annmarie Wang^{3,4}, Pradeep Mangalath, MBA^{3,5} and Laura B. Kleiman, PhD³; ¹BM Research, Yorktown Heights, New York, United States, ²University of Melbourne, Melbourne, Australia, ³Cures Within Reach for Cancer, Cambridge, Massachusetts, United States, ⁴Massachusetts Institute of Technology, Cambridge, Massachusetts, United States, ⁵Harvard Medical School, Boston, Massachusetts, United States

6. *Concise Multi-head Attention Models*

Srinadh Bhojanapalli, PhD², Chulhee Yun, MS¹, Ankit Singh Rawat PhD², Sashank Reddi PhD², Sanjiv Kumar PhD²; ¹MIT, ²Google Research

7. *Are Transformers universal approximators of sequence-to-sequence functions?*

Srinadh Bhojanapalli, PhD², Chulhee Yun, MS¹, Ankit Singh Rawat, PhD², Sashank Reddi, PhD², Sanjiv Kumar, PhD²; ¹MIT, ²Google Research

8. *Learning to Map Natural Language Instructions to Physical Quadcopter Control using Simulated Flight*

Valts Blukis, Yannick Terme, Eyvind Niklasson, Ross A. Knepper, Yoav Artzi; Cornell Tech

9. *AMPERSAND: Argument Mining for PERSuasive oNline Discussions*

Tuhin Chakrabarty, MS, Christopher Hidey; Columbia University, USC

10. *A Neural Text Generation Approach for Improving Food Service Natural Language Understanding*

John Chen, PhD¹, Ruolin Su, Intern¹ and PhD Student², Srinivas Bangalore, PhD¹; ¹Interactions LLC, Murray Hill, New Jersey, United States, ²Georgia Institute of Technology, Atlanta, Georgia, United States

11. *Holistic Confidence Modeling and Grounding Semantic Frames for Virtual Assistants*

John Chen PhD¹, Rashmi Prasad PhD¹, Srinivas Bangalore PhD¹; ¹Interactions LLC

12. *Spatiotemporal Data for Grounded Representations of Actions*

Dylan Ebert, PhD, Ellie Pavlick; Brown University

13. *Automated Pyramid Summarization Evaluation*

YanJun Gao, PhD, Chen Sun, Rebecca J. Passonneau; Pennsylvania State University

14. *Modeling Label Semantics for Predicting Emotional Reactions*

Radhika Gaonkar, MS¹, Niranjan Balasubramanian, Assistant Professor¹, Nathanael Chambers, Associate Professor²; ¹Stony Brook University, Stony Brook, New York, United States, ²United States Naval Academy, Annapolis, Maryland, United States

15. *Low Level Linguistic Controls for Style Transfer and Content Preservation*

Katy Gero, Chris Kedzie, Jonathan Reeve and Lydia Chilton; Columbia University

16. *Using Prosody to Improve Parsing of Spontaneous Speech*

Hussein Ghaly, MA, Michael Mandel; CUNY, Graduate Center, Linguistics Program

17. *Do Attention Heads in BERT Track Syntactic Dependencies?*

Phu-Mon Htut¹, PhD Candidate, Jason Phang, PhD¹, Shikha Bordia, MSc¹, Samuel R. Bowman
¹New York University, New York, New York, United States

18. *When do neural models adopt heuristics?*

Rohan Jha, Ellie Pavlick; Brown University

19. *That and There: Judging the Intent of Pointing Actions with Robotic Arms*

Baber Khalid, PhD, Malihe Alikhani, Rahul Shome, Chaitanya Mitash, Kostas Bekris, Matthew Stone
Computer Science, Rutgers University, Piscataway, New Jersey, USA

20. *Knowledge Discovery from Textual Data on Ordinances and Tweets with Web Dissemination*

Matthew Kowalski, BS, Aparna S. Varde, Boxiang Dong; Department of Computer Science, Montclair State University

- 21. *Automatic Speech Recognition of Cantonese Using Transfer Learning from Mandarin***
Bryan Li, MS, Xinyue Wang, Homayoon Beigi; Columbia University, Recognition Technologies, Inc.
- 22. *Acute-Eval: Improved dialogue evaluation with optimized questions and multi-turn comparisons***
Margaret Li, Jason Weston, Stephen Roller; Facebook AI Research, 770 Broadway, New York, NY 10003
- 23. *Enhancing Response Generation Using Chat Flow Identification***
Ruirui Li, PhD, Jyun-Yu Jiang, Chelsea J.-T. Ju, Cheryl Flynn, Wen-ling Hsu, Jia Wang, Wei Wang, Tan Xu
University of California Los Angeles; ATT Lab
- 24. *Towards Minimal Supervision BERT-based Grammar Error Correction***
Yiyuan Li, MS¹, Antonios Anastasopoulos, PhD¹, Alan W Black, PhD¹; ¹Language Technology Institute,
Carnegie Mellon University
- 25. *Comparison of Interactive Knowledge Base Spelling Correction Models for Low-Resource Languages***
Yiyuan Li, MS¹, Antonios Anastasopoulos, PhD¹, Alan W Black, PhD¹; ¹Language Technology Institute,
Carnegie Mellon University
- 26. *Challenges of using speech technologies for virtual reading partner in real classroom***
Anastassia Loukina, PhD¹, Beata Beigman Klebanov, PhD¹; ¹Educational Testing Service
- 27. *Internal-Consistency Constraints For Emer- Gent Communication***
Charles Lovering, PhD Student, Ellie Pavlick; Brown University
- 28. *Non-topical coherence in social talks***
Alex Lurum MA, Sophia A. Malamud, PhD; Brandeis University
- 29. *Multi-task Pairwise Neural Ranking for Hashtag Segmentation***
Mounica Maddela, Wei Xu, Daniel Preoțiu-Pietro; The Ohio State University, Bloomberg LP
- 30. *BERTs of a feather do not generalize together***
Junghyun Min, BS¹, R. Thomas McCoy¹, Tal Linzen¹; ¹Johns Hopkins University
- 31. *Speaker Verification For Children's Speech Using Unsupervised Domain Adaptation of Adult Speech***
Abhinav Misra, PhD, Yao Qian, Keelan Evanini; Educational Testing Service
- 32. *Towards automated conversational health coaching***
Elliot G Mitchell, MA, Mphil¹, Lena Mamykina, PhD¹; ¹Department of Biomedical Informatics, Columbia
University, New York, NY

33. *The (great) persuasion divide? An argument mining approach to gender disparities in debate speeches & evaluations*

Huyen Nguyen, PhD Student; Erasmus University Rotterdam, Rotterdam, Netherlands Columbia University, New York, New York, United States

34. *'Tell me more': Predicting Counselor Moves in Motivational Interviewing for Substance Use*

Stefan Olafsson, MA, Timothy Bickmore, PhD, Byron Wallace, PhD; Northeastern University, Northeastern University

35. *Semantic Parsing to Handle Temporal Constraints for Planning*

Roma Patel, PhD Student, Ellie Pavlick, Stefanie Tellex; Brown University

36. *Dialog Intent Induction with Deep Multi-View Clustering*

Hugh Perkins, Masters, Yi Yang; ASAPP Inc.

37. *Semi-Supervised Learning for Natural Language Understanding: A Negative Result*

Jason Phang, PhD, Samuel R. Bowman; New York University Center for Data Science

38. *A pilot study for a novel and personalized voice restoration device for patients with laryngectomy*

Anais Rameau, MD, MPhil, Weill Cornell Medicine

39. *The Compositionality of LSTM Training*

Naomi Saphra, Adam Lopez; University of Edinburgh

40. *Automatic methods of detecting audio events in digital media for cultural analytics: a comparative study*

Aalok Sathe, Taylor Arnold, PhD; University of Richmond

41. *Alignment and power spectrum overlap (PSO) in dyadic, task-oriented, text conversations*

Jen Seale, Max Sperlich; ASAPP

42. *Modeling Empathy and Distress in Reaction to News Stories*

João Sedoc, PhD., Sven Buechel, Anneke Buffone, Barry Slaff, Lyle Ungar; JULIE Lab, Friedrich-Schiller-Universität Jena, Facebook, Computer & Information Science, University of Pennsylvania

43. *ConvGAN: A Context-Aware Conversation GAN*

Zejiang Shen, Ruo Chen Zhang, MSc¹, Carsten Eickhoff, PhD¹; Harvard University, ¹Brown University, Providence, Rhode Island, United States

44. *A Generative Model of Argumentation by Comparing Latent Belief States across Commenters*

Suzanna Sia, PhD C.S., Kokil Jaidka, Niyati Chhaya, Kevin Duh; Johns Hopkins University, Nanyang Technological University, Adobe

45. *Discourse Relation Embeddings in Social Media*

Youngseo Son, PhD Student, H Andrew Schwartz, Assistant Professor; Stony Brook University

46. *Temporal Projected Word Embeddings for Predicting Future Job Requirements*

Paul Squires, PhD, Andre Mendes de Silva, MS, Catalina M. Jaramillo, MS, Julian Togelius, PhD, Harold G. Kaufman, PhD; New York University, Tandon School of Engineering, New York, New York

47. *Witscript: Computational Methods for Generating Contextually Integrated Jokes*

Joseph Toplyn, SB; Twenty Lane Media, LLC

48. *Pretraining Language Models on Logical Operators*

Aaron Traylor, Ellie Pavlick, Roman Feiman; Brown University

49. *Using Text Embeddings for Causal Inference*

Victor Veitch, PhD, Dhanya Sridhar, David M. Blei; Columbia University

50. *A Generalized Framework of Sequence Generation with Application to Undirected Sequence Models*

Alex Wang, PhD, Elman Mansimov, Kyunghyun Cho; NYU

51. *Detecting Political Euphemism and Party Platform: Adversarial Decomposition of Word Embeddings as Denotation and Connotation Vectors*

Albert Webson, PhD, Ellie Pavlick; Brown University

52. *Deconfounding acoustic-prosodic entrainment and self-consistency through Deep Neural Networks*

Andreas Weise, PhD Student¹, Rivka Levitan, PhD^{1,2}; ¹The Graduate Center, CUNY, New York, NY, USA
²Brooklyn College, CUNY, Brooklyn, NY, USA

53. *Individual Differences in Acoustic-Prosodic Entrainment in Spoken Dialogue*

Andreas Weise, PhD Student¹, Sarah Ita Levitan, PhD¹, Julia Hirschberg, PhD¹, Rivka Levitan, PhD^{2&3}
¹Columbia University, New York, NY, USA, ²The Graduate Center, CUNY, New York, NY, USA,
³Brooklyn College, CUNY, Brooklyn, NY, USA

54. *Deep Learning for Alzheimer's & Dementia: Empathetic Speech Synthesis using Few-Shot Neural Voice Modeling*

Kevin Wu, Boston Consulting Group (BCG) Digital Ventures, Elovec Inc.

55. *Linguistically-informed Training of Acoustic Word Embeddings for Low-resource Languages*

Zixiaofan Yang, PhD Student, Julia Hirschberg; Columbia University

56. *Robots that Learn Game Strategy by Asking Questions*

Maryam Zare, PhD, Ali Ayub, Alan R. Wagner, Rebecca J. Passonneau; Pennsylvania State University

57. *From Documents to Aspects to Answers: A Multi-label, Multi-document, Open-vocabulary Classification Task*

Yury Zemlyanskiy¹, Sudeep Gandhe¹, Juraj Gottweis¹, Fei Sha², Ilya Eckstein¹; ¹Google; ²Google (on leave from University of Southern California)

58. *UndNet - A Mutual Understanding Maximization Framework*

Ruochen Zhang, Masters², Zejiang Shen, MSc¹, Carsten Eickhoff, PhD²

¹Harvard University, Cambridge, Massachusetts, United States,

²Brown University, Providence, Rhode Island, United States

59. *Given-New Distinction examined through Wikipedia Edit History*

Holly Zheng, Ellie Pavlick; Brown University

60. *Tracking Social Media Usage and Utility for Endangered Languages: A Temporal Irish Analysis*

Sydney Zink, Ellie Pavlick; Brown University