# Jonathan David Louis May

Contact 4676 Admiralty Way, Suite 1001 Phone: (310) 448-9157 Marina Del Rey, CA 90292 Email: jonmay@isi.edu Information Research Computational Linguistics, Dialogue, Machine Translation, Interests Machine Learning, Semantics, Automata Theory Work USC Information Sciences Institute, Marina Del Rey, California EXPERIENCE Research Associate Professor, Department of Computer Science July 2022 - present Research Assistant Professor, Department of Computer Science July 2016 - June 2022 Classes: CSCI 662, Advanced Natural Language Processing Fall 2019-22 CSCI 544, Applied Natural Language Processing Fall 2017,2018 Research Team Leader, Artificial Intelligence Division July 2021 - present July 2018 - June 2021 Research Lead, Artificial Intelligence Division May 2014 - June 2018 Computer Scientist, Intelligent Systems Division Programs: DARPA-KMASS (Co-PI) 2022 -DARPA-SHADE AIE (PI, sub to UMD) 2022 -DARPA-Civil Sanctuary AIE (PI) 2021 -DARPA-INCAS 2021 -DARPA-REMATH 2020 -Amazon Alexa Prize (PI) 2020 - 2021NIH-EVIDENCEEXTR (PI) 2020-2021 IARPA-BETTER 2019 -DARPA-KAIROS (Co-PI) 2019 -DARPA-MCS 2019 -DARPA-LWLL (Co-PI) 2019 -DARPA-ASED 2019 -IARPA-MATERIAL (Co-PI) 2017 - 2021DARPA-LORELEI (Co-PI, PI) 2016 -DEEPLANG (PI) 2015 DARPA-BOLT 2014-2015 IARPA-Metaphor 2014 - 2015Amazon, Seattle, Washington Consultant, Search Oct. 2021 - Sep. 2022 Scholar, Search Oct. 2022 - present SDL Language Weaver, Los Angeles, California Research Scientist Aug. 2010 - May 2014 Government Projects Technical Lead: FP7-FAUST (Feedback Analysis for User-Adaptive Statistical Translation)

DARPA-BOLT (Broad Operation Language Translation)

CTTSO/TSWG-MTIL (Machine Translation for Informal Language)

## BBN Technologies, Cambridge, Massachusetts

Staff Scientist, Natural Language Processing group

Sep. 2001 - Jun. 2004

#### **EDUCATION**

## University of Southern California, Los Angeles, California

Ph.D, Computer Science.

Sep. 2004 - Aug. 2010

Thesis: "Weighted Tree Automata and Transducers for Syntactic Natural Language Processing" (Committee: Kevin Knight (chair), Daniel Marcu, David Chiang, Sven Koenig, Shri Narayanan, Fernando Pereira)

## University of Pennsylvania, Philadelphia, Pennsylvania

M.S.E., Computer and Information Science

Feb. 2000-May 2001

B.S.E., Computer Science Engineering.

Sep. 1997-May 2001

## Grants and Gifts Awarded

"ALLAN: Agents Learning Lying And Negotiation." Jonathan May, PI; sub to UMD.

"DARMA: Dialogue Agent for Reducing Malicious Acts." Jonathan May, PI. Kristina Lerman, PI.

"UPSCALE: Universal Population Segmentation and Characterization Algorithms for OnLine Environments." Emilio Ferrara, PI, Allessandro Flamini and Jacob Shapiro, Co-PIs.

"SMELLCPS: Symbolic Math Expressions from Low-level Logic in Cyber-physical Systems." Luis Garcia, PI, Christophe Hauser, Co-PI. DARPA.

"Viola: Neural Generation with Improvised Dialogues and Common Sense Reasoning." Jonathan May, PI. 2020–2021. Amazon.

"Bloomberg Fellowship Support Award." Jonathan May, Pl. 2020. Bloomberg.

"Universal Translators for Asylum Seekers at the Border." Jonathan May, PI. 2020. ISI Research Award.

"CLEAR: Cross-Lingual Event & Argument Retrieval." Elizabeth Boschee, PI, Scott Miller, Co-PI. 2019–2022. IARPA.

"LESTAT: Discovering Schemas from Diverse Data." Ralph Weischedel, PI, Marjorie Freedman, Jonathan May, Co-PIs. 2019–2023. DARPA.

"Discovering Common Sense from Video, Images, Text and Knowledge Bases." Ralph Weischedel, PI, Marjorie Freedman, Co-PI. 2019–2022. DARPA.

"CORAL: Combined Representations for Adept Learning." Aram Galstyan (2019–2020), Wael Abd-Almageed (2021–2022), PI, Wael Abd-Almageed (2019–2020), Jonathan May (2021–2022), Pedro Szekely, Ralph Weischedel, Co-PIs. 2019–2022. DARPA.

"Summarization and domain-Adaptive Retrieval Across Languages." Scott Miller, PI. Jonathan May, Elizabeth Boschee, Co-PIs. 2017–2021. IARPA.

"Exploiting Language Information for Situational Awareness." Kevin Knight (2015–2018), Jonathan May (2018–2021), PI. Daniel Marcu (2015–2017), Jonathan May (2017–2018), Co-PI. 2015–2021.

"DEEPLANG". Jonathan May, PI. 7/27/15-9/30/15. MITRE.

### PATENTS

# "Efficient online domain adaptation".

Felix Hieber and Jonathan May. US 9,213,694. Awarded December 15, 2015.

"Personalized machine translation via online adaptation".

Daniel Marcu and Jonathan May. US 9,152,622. Awarded October 6, 2015.

"Modification of annotated bilingual segment pairs in syntax-based machine translation".

Wei Wang and Jonathan May and Kevin Knight. US 8,825,466. Awarded September 2, 2014.

"Systems and methods for tuning parameters in statistical machine translation".

Mark Hopkins and Jonathan May. US 8,694,303. Awarded April 8, 2014.

# STUDENTS SUPERVISED AND MENTORED

## Ph.D Students

Xusen Yin	(from Kevin Knight in 2018) Ph.D. Summer 2021; 2016–2021
Nada Aldarrab	(from Kevin Knight in 2018) Ph.D Fall 2022; 2017–2022
Thamme Gowda	Ph.D Summer 2022; 2018–2022
Meryem M'Hamdi	2019–
Mozhdeh Gheini	2019–
Alex Spangher	(co-advised with Emilio Ferrara) 2019–
Justin Cho	2020-
Katy Felkner	2020–
Jacob Bremerman	(co-advised with Xiang Ren) 2021–

## MS Students

Apoorva Sharma	2022-
Darpan Jain	2021-
Kartik Shenoy	2021-
Shuai Liu	2020-
David Jiang-Gorsline	MS Spring 2020; 2019–2020
Tian Xie	MS Spring 2018; 2017–2018
Jibiao Shen	MS Fall 2018; 2017–2018
Mozhdeh Gheini	MS Fall 2018; 2017–2018
Bashar Alhafni	(co-advised with Nanyun Peng) MS Spring 2019; 2018–2019

## Undergraduate Students

Timothy Wang 2022– Justin Cho (HKUST) BS Spring 2019; 2019

### Summer Interns

2022: Taiwei Shi (Georgia Tech) (with Xuezhe Ma), Jonne Saleva (Brandeis), Jacqueline He (Princeton) (with Xuezhe Ma)

2021: Shira Wein (Georgetown), Zeyu Liu (University of Washington), Shanxiu He (UCLA) (with Xuezhe Ma and Muhao Chen)

2020: Omar Shaikh (Georgia Tech), Ugur Yavuz (Dartmouth College), Weiqiu You (University of Pennsylvania), Naitian Zhou (University of Michigan)

2019: Justin Cho (Hong Kong Univ. of Science and Technology), Denis Emelin (Edinburgh), Zhifeng Hu (Fudan Univ.) Angelina McMillan-Major (UW), Prince Wang (UCSB), Shufan Wang (UMass) (with Nanyun Peng)

2018: Ronald Cardenas (Charles University in Prague), Mozhdeh Gheini (USC), Xiaolei Huang (Univ. of Colorado), Allison Limke (Wartburg College), James Mullenbach (Georgia Tech), Xinyu Wang (CMU) (with Nanyun Peng)

2017: Yining Chen (Dartmouth), Leon Cheung (UCSD), Sorcha Gilroy (Edinburgh), Nelson Liu (UW), Alexandra (Sasha) Mayn (Carleton College) (with Kevin Knight)

2016: Nada Aldarrab (USC), Angeliki Laziradou (U. Trento), Xiang Li (U. Chicago), Sabrina Mielke (Dresden Univ. Technology), Ke Tran (U. Amsterdam) (with Kevin Knight and Daniel Marcu)

### **PUBLICATIONS**

#### Refereed Conference Papers (54)

Jacob Bremerman, Xiang Ren and Jonathan May. "Machine Translation Robustness to Natural Asemantic Variation". *Proc. EMNLP*, 2022. To Appear.

Nada Aldarrab and Jonathan May. "Segmenting Numerical Substitution Ciphers". *Proc. EMNLP*, 2022. To Appear.

Jiao Sun, Swabha Swayamdipta, Jonathan May and Xuezhe Ma. "Investigating the Benefits of Free-Form Rationales". Findings of EMNLP, 2022. To Appear.

Hyundong Cho, Chinnadhurai Sankar, Christopher Lin, Kaushik Ram Sadagopan, Shahin Shayandeh, Asli Celikyilmaz, Jonathan May and Ahmad Beirami. "Know Thy Strengths: Comprehensive Dialogue State Tracking Diagnostics". *Findings of EMNLP*, 2022. To Appear.

Ashutosh Joshi, Shankar Vishwanath, Choon Hui Teo, Vaclav Petricek, Vishy Vishwanathan, Rahul Bhagat, and Jonathan May. "Augmenting Training Data for Massive Semantic Matching Models in Low-Traffic E-commerce Stores". *Proc. NAACL Industry Track* (33%), 2022.

Alexander Spangher, Xiang Ren, Jonathan May, and Nanyun Peng. "NewsEdits: A Dataset of News Article Revision Histories and a Novel Document-Level Reasoning Challenge". *Proc. NAACL* (22%), 2022. **Outstanding Paper Award.** 

Kushal Chawla, Gale Lucas, Jonathan May, and Jonathan Gratch. "Opponent Modeling in Negotiation Dialogues by Related Data Adaptation". Findings of NAACL (31%), 2022.

Hengameh Mirzaalian, Mohamed E. Hussein, Leonidas Spinoulas, Jonathan May and Wael Abd-Almageed. "Explaining Face Presentation Attack Detection Using Natural Language". Proc. IEEE International Conference on Automatic Face and Gesture Recognition (35%), 2021.

Xuezhe Ma, Xiang Kong, Sinong Wang, Chunting Zhou, Jonathan May, Hao Ma and Luke Zettlemoyer. "Luna: Linear Unified Nested Attention". *Proc. NeurIPS* (26%), 2021.

Alexander Spangher, Jonathan May, Sz-Rung Shiang and Lingjia Deng. "Multitask Semi-Supervised Learning for Class-Imbalanced Discourse Classification". Proc. EMNLP (23%), 2021.

Xiyang Zhang, Muhao Chen and Jonathan May. "Salience-Aware Event Chain Modeling for Narrative Understanding". Proc. EMNLP (23%), 2021.

Mozhdeh Gheini, Xiang Ren and Jonathan May. "Cross-Attention is All You Need: Adapting Pretrained Transformers for Machine Translation". *Proc. EMNLP* (23%), 2021.

Thamme Gowda, Zhao Zhang, Chris Mattmann and Jonathan May. "Many-to-English Machine Translation Tools, Data, and Pretrained Models". *Proc. ACL Demo Track* (32%), 2021.

Karen Hambardzumyan, Hrant Khachatrian and Jonathan May. "WARP: Word-level Adversarial ReProgramming". *Proc. ACL* (21%), 2021.

Nada Aldarrab and Jonathan May. "Can Sequence-to-Sequence Models Crack Substitution Ciphers?". Proc. ACL (21%), 2021.

Thamme Gowda, Weiqiu You, Constantine Lignos and Jonathan May. "Macro-Average: Rare Types Are Important Too". Proc. NAACL (26%), 2021.

Meryem M'hamdi, Doo Soon Kim, Franck Dernoncourt, Trung Bui, Xiang Ren and Jonathan May. "X-METRA-ADA: Cross-lingual Meta-Transfer learning Adaptation to Natural Language Understanding and Question Answering". *Proc. NAACL* (26%), 2021.

Kushal Chawla, Jaysa Ramirez, Rene Clever, Gale Lucas, Jonathan May and Jonathan Gratch. "CaSiNo: A Corpus of Campsite Negotiation Dialogues for Automatic Negotiation Systems". *Proc. NAACL* (26%), 2021.

Xusen Yin, Ralph Weischedel and Jonathan May. "Learning to Generalize for Sequential Decision Making". Findings of EMNLP (38%), 2020.

Thamme Gowda and Jonathan May. "Finding the Optimal Vocabulary Size for Neural Machine Translation". Findings of EMNLP (38%), 2020.

Yonatan Bisk, Ari Holtzman, Jesse Thomason, Jacob Andreas, Yoshua Bengio, Joyce Chai, Mirella Lapata, Angeliki Lazaridou, Jonathan May, Aleksandr Nisnevich, Nicolas Pinto and Joseph Turian. "Experience Grounds Language". *Proc. EMNLP* (22%), 2020.

Manling Li, Qi Zeng, Ying Lin, Kyunghyun Cho, Heng Ji, Jonathan May, Nathanael Chambers and Clare Voss. "Connecting the Dots: Event Graph Schema Induction with Path Language Modeling". Proc. EMNLP (22%), 2020.

Justin Cho and Jonathan May. "Grounding Conversations with Improvised Dialogues". Proc. ACL (23%), 2020.

Di Lu, Ananya Subburathinam, Heng Ji, Jonathan May, Shih-Fu Chang, Avirup Sil, and Clare Voss. "Cross-lingual Structure Transfer for Relation and Event Extraction". *Proc. LREC* (60%), 2020.

James Mullenbach, Jonathan Gordon, Nanyun Peng, and Jonathan May. "Do Nuclear Submarines Have Nuclear Captains? A Challenge Dataset for Commonsense Reasoning over Adjectives and Objects". *Proc. EMNLP* (26%), 2019.

Ananya Subburathinam, Di Lu, Heng Ji, Jonathan May, Shih-Fu Chang, Avirup Sil, and Clare Voss. "Cross-lingual Structure Transfer for Relation and Event Extraction". *Proc. EMNLP* (26%), 2019.

Xiaolei Huang, Jonathan May, and Nanyun Peng. "What Matters for Neural Cross-Lingual Named Entity Recognition: An Empirical Analysis". *Proc. EMNLP* (26%), 2019.

Meryem M'hamdi, Marjorie Freedman, and Jonathan May. "Contextualized Cross-Lingual Event Trigger Extraction with Minimal Resources". *Proc. CoNLL* (22%), 2019.

Elizabeth Boschee, Joel Barry, Jayadev Billa, Marjorie Freedman, Thamme Gowda, Constantine Lignos, Chester Palen-Michel, Michael Pust, Banriskhem Kayang Khonglah, Srikanth Madikeri, Jonathan May and Scott Miller. "SARAL: A Low-Resource Cross-Lingual Domain-Focused Information Retrieval System for Effective Rapid Document Triage". Proc. ACL Demo Track (35%), 2019.

Nima Pourdamghani, Nada Aldarrab, Marjan Ghazvininejad, Kevin Knight and Jonathan May. "Translating Translationese: A Two-Step Approach to Unsupervised Machine Translation". *Proc. ACL* (23%), 2019.

Xusen Yin and Jonathan May. "Comprehensible Context-driven Text Game Playing". *Proc. CoG* (41%), 2019.

Ronald Cardenas, Ying Lin, Heng Ji and Jonathan May. "A Grounded Unsupervised Universal Part-of-Speech Tagger for Low-Resource Languages". *Proc. NAACL* (26%), 2019.

Lifu Huang, Heng Ji and Jonathan May. "Cross-lingual Multi-Level Adversarial Transfer to Enhance Low-Resource Name Tagging". Proc. NAACL (26%), 2019.

Ulf Hermjakob, Jonathan May, Michael Pust, and Kevin Knight. "Translating a Language You Don't Know In the Chinese Room". *Proc. ACL Demo Track* (30%), 2018.

Ulf Hermjakob, Jonathan May, and Kevin Knight. "Out-of-the-box Universal Romanization Tool uroman". Proc. ACL Demo Track (30%), 2018. Best Demo Award.

Boliang Zhang, Ying Lin, Xiaoman Pan, Di Lu, Jonathan May, Kevin Knight and Heng Ji. "ELISA-EDL: A Cross-lingual Entity Extraction, Linking and Localization System". *Proc. NAACL Demo Track* (51%), 2018.

Yining Chen, Sorcha Gilroy, Andreas Maletti, Jonathan May, and Kevin Knight. "Recurrent Neural Networks as Weighted Language Recognizers". *Proc. NAACL* (30%), 2018. **Outstanding Paper Award.** 

Pavlos Papadopoulos, Ruchir Travadi, Colin Vaz, Nikolaos Malandrakis, Ulf Herm-jakob, Nima Pourdamghani, Michael Pust, Boliang Zhang, Xiaoman Pan, Di Lu, Ying Lin, Ondřej Glembek, Murali Karthick Baskar, Martin Karafiát, Lukáš Burget, Jonathan May, Heng Ji, Kevin Knight, and Shrikanth Narayanan. "Team ELISA System for DARPA LORELEI Speech Evaluation 2016". *Proc. Interspeech* (51%), 2017.

Xiaoman Pan, Boliang Zhang, Jonathan May, Joel Nothman, Kevin Knight and Heng Ji. "Cross-lingual Name Tagging and Linking for 282 Languages".  $Proc.\ ACL\ (23\%),\ 2017.$ 

Barret Zoph, Deniz Yuret, Jonathan May and Kevin Knight. "Transfer Learning for Low-Resource Neural Machine Translation". Proc. EMNLP (24%), 2016.

Barret Zoph, Ashish Vaswani, Jonathan May and Kevin Knight. "Simple, Fast Noise-Contrastive Estimation for Large RNN Vocabularies". Proc. NAACL (26%), 2016.

Eunsol Choi, Matic Horvat, Jonathan May, Kevin Knight and Daniel Marcu. "Extracting Structured Scholarly Information from the Machine Translation Literature". *Proc. LREC* (60%), 2016.

Michael Pust, Ulf Hermjakob, Kevin Knight, Daniel Marcu, and Jonathan May. "Parsing English into Abstract Meaning Representation Using Syntax-Based Machine Translation". *Proc. EMNLP* (26%), 2015.

Jonathan May, Yassine Benjira, and Abdessamad Echihabi. "An Arabizi-English Social Media Statistical Machine Translation System". Proc. AMTA, 2014.

Alberto Barrón-Cedeño, Lluís Màrquez, Carlos A. Henríquez Q., Lluís Formiga, Enrique Romero, and Jonathan May. "Identifying Useful Human Correction Feedback from an On-line Machine Translation Service". *Proc. IJCAI* (28%), 2013.

Mark Hopkins and Jonathan May. "Models of Translation Competitions". Proc. ACL (26%), 2013.

Daniel Pighin, Lluís Màrquez, and Jonathan May. "An Analysis (and an Annotated Corpus) of User Responses to Machine Translation Output". *Proc. LREC* (69%), 2012

Mark Hopkins and Jonathan May. "Tuning as Ranking". Proc. EMNLP (24%), 2011.

Jonathan May, Kevin Knight, and Heiko Vogler. "Efficient Inference Through Cascades of Weighted Tree Transducers". *Proc. ACL* (25%), 2010.

Jonathan May and Kevin Knight. "Syntactic Re-Alignment Models for Machine Translation". Proc. EMNLP (27%), 2007.

Johanna Högberg, Andreas Maletti, and Jonathan May. "Bisimulation Minimisation for Weighted Tree Automata". Proc. International Conference on Developments in Language Theory (DLT), 2007.

Johanna Högberg, Andreas Maletti, and Jonathan May. "Backward and Forward Bisimulation Minimisation of Tree Automata". Proc. International Conference on Implementation and Application of Automata (CIAA) (29%), 2007.

Jonathan May and Kevin Knight. "Tiburon: A Weighted Tree Automata Toolkit". Proc. International Conference on Implementation and Application of Automata (CIAA), 2006.

Jonathan May and Kevin Knight. "A Better N-Best List: Practical Determinization of Weighted Finite Tree Automata". *Proc. NAACL-HLT* (24%), 2006.

#### Refereed Journal Articles (6)

Ulf Hermjakob, Qiang Li, Daniel Marcu, Jonathan May, Sebastian J. Mielke, Nima Pourdamghani, Michael Pust, Xing Shi, Kevin Knight, Tomer Levinboim, Kenton Murray, David Chiang, Boliang Zhang, Xiaoman Pan, Di Lu, Ying Lin, Heng Ji. "Incident-Driven Machine Translation and Name Tagging for Low-resource Languages". *Machine Translation* (2.91 IF). October, 2017.

Lifu Huang, Jonathan May, Xiaoman Pan, Heng Ji, Xiang Ren, Jiawei Han, Lin Zhao, James A. Hendler. "Liberal Entity Extraction: Rapid Construction of Fine-Grained Entity Typing Systems". *Big Data* (2.55 IF). 5(1). March, 2017.

Wei Wang, Jonathan May, Kevin Knight, and Daniel Marcu. "Re-Structuring, Re-Labeling, and Re-Aligning for Syntax-Based Machine Translation". *Computational Linguistics* (1.32 IF). 36(2). June, 2010.

Johanna Högberg, Andreas Maletti, and Jonathan May. "Backward and Forward Bisimulation Minimisation of Tree Automata". *Theoretical Computer Science* (0.72 IF). 410(37). September, 2009.

Jonathan Graehl, Kevin Knight, and Jonathan May. "Training Tree Transducers". Computational Linguistics (1.32 IF), 34(3). September, 2008.

Jonathan May, Ada Brunstein, Prem Natarajan, and Ralph Weischedel. "Surprise! What's in a Cebuano or Hindi Name?". *ACM Transactions on Asian Language Information Processing* (1.65 IF), 2(3). September, 2003.

# Refereed Workshop Papers (18)

Pengfei Yu, Zixuan Zhang, Clare Voss, Jonathan May and Heng Ji. "Building an Event Extractor with Only a Few Examples". *Proc. DeepLo*, 2022.

Virginia K. Felkner, Ho-Chun Herbert Chang, Eugene Jang, and Jonathan May. "Towards WinoQueer: Developing a Benchmark for Anti-Queer Bias in Large Language Models". *Proc. Queer in AI @ NAACL*, 2022.

Nicolaas Weideman, Virginia K. Felkner, Wei-Cheng Wu, Jonathan May, Christophe Hauser and Luis Garcia. "PERFUME: Programmatic Extraction and Refinement for Usability of Mathematical Expression". *Proc. Checkmate*, 2021.

Xusen Yin, Li Zhou, Kevin Small, and Jonathan May. "Summary-Oriented Question Generation for Informational Queries". Proceedings of the 1st Workshop on Document-grounded Dialogue and Conversational Question Answering (DialDoc 2021), 2021.

Aurelie Herbelot, Xiaodan Zhu, Alexis Palmer, Nathan Schneider, Jonathan May and Ekaterina Shutova (Editors). *Proceedings of the Fourteenth Workshop on Semantic Evaluation*, 2020.

Alexander Spangher, Nanyun Peng, Jonathan May, and Emilio Ferrara. "Enabling Low-Resource Transfer Learning across COVID-19 Corpora by Combining Event-Extraction and Co-Training". *Proc. Workshop on NLP for COVID-19 at ACL 2020*, 2020.

Karin Verspoor, Kevin Bretonnel Cohen, Mark Dredze, Emilio Ferrara, Jonathan May, Robert Munro, Cecile Paris, and Byron Wallace (Editors). *Proceedings of the 1st Workshop on NLP for COVID-19 at ACL 2020*, 2020.

Alexander Spangher, Jonathan May, Emilio Ferrara, and Nanyun Peng. "Don't quote me on that': Finding Mixtures of Sources in News Articles". *Proc. Computation + Journalism Symposium*, 2020.

Alexander Spangher, Emilio Ferrara, Jonathan May, and Nanyun Peng. "Modeling 'Newsworthiness' for Lead-Generation Across Corpora". *Proc. Computation + Journalism Symposium*, 2020.

Xiaoman Pan, Thamme Gowda, Heng Ji, Jonathan May, and Scott Miller. "Crosslingual Joint Entity and Word Embedding to Improve Entity Linking and Parallel Sentence Mining". *Proc. DeepLo*, 2019.

Jonathan May, Ekaterina Shutova, Auerlie Herbelot, Xiaodan Zhu, Marianna Apidianaki, and Saif M. Mohammad (Editors). *Proceedings of the 13th International Workshop on Semantic Evaluation*. 2019.

Nanyun Peng, Marjan Ghazvininejad, Jonathan May, and Kevin Knight. "Towards Controllable Story Generation". Proc. of the 1st Workshop on Storytelling, 2018.

Marianna Apidianaki, Saif M. Mohammad, Jonathan May, Ekaterina Shutova, Steven Bethard, and Marine Carpuat (Editors). *Proceedings of the 12th International Workshop on Semantic Evaluation*. 2018.

Jonathan May and Jay Priyadarshi. "SemEval-2017 Task 9: Abstract Meaning Representation Parsing and Generation". *Proc. SemEval*, 2017.

Jonathan May. "SemEval-2016 Task 8: Meaning Representation Parsing". *Proc. SemEval*, 2016.

Jonathan Gordon, Jerry Hobbs, Jonathan May, Michael Mohler, Fabrizio Morbini, Bryan Rink, Marc Tomlinson, and Suzanne Wertheim. "A Corpus of Rich Metaphor Annotation". Proc. Workshop on Metaphor in NLP, 2015.

Jonathan Gordon, Jerry Hobbs, Jonathan May, and Fabrizio Morbini. "High-Precision Abductive Mapping of Multilingual Metaphors". *Proc. Workshop on Metaphor in NLP*, 2015.

Matthias Büchse, Jonathan May, and Heiko Vogler. "Determinization of Weighted Tree Automata Using Factorizations". *Proc. ATANLP*, 2009.

## BOOK CHAPTERS (2)

Jonathan May and Joseph Dane. "Evidence and Artificial Intelligence". In Joseph A. Dane et al., Begging The Question: Chauceriana, Book History, and Humanistic Inquiry (Mythodologies II). Los Angeles: Loyola Marymount Univ. Press, 2019.

Kevin Knight and Jonathan May. "Applications of Weighted Automata in Natural Language Processing". In M. Droste, W. Kuich, and H. Vogler, editors, *Handbook of Weighted Automata*. Springer-Verlag, 2009.

#### OTHER PUBLICATIONS (2)

Jinxi Xu, Ana Licuanan, Jonathan May, Scott Miller, and Ralph Weischedel. "Answer Selection and Confidence Estimation". New Directions in Question Answering, Papers from 2003 AAAI Spring Symposium, Stanford University, Stanford, CA AAAI Press, 2003.

Jinxi Xu, Ana Licuanan, Jonathan May, Scott Miller, and Ralph Weischedel. "TREC 2002 QA at BBN: Answer Selection and Confidence Estimation". *Proc. TREC*, 2002.

## Service

Qualifying Exam Committee: Nikos Malandrakis (2019), Brendan Kennedy (2020), Jacqueline Brixey (2020), Karan Singla (2020), Sami Abu-El-Haija (2020), Xusen Yin (Chair, 2020), Nada Aldarrab (Chair, 2020), Thamme Gowda (Chair, 2021), Yury Zemlyanskiy (2021), Meryem M'Hamdi (Chair, 2021), Jiao Sun (2021), Sabyasachee Baruah (2021), Kushal Chawla (2021), Mozhdeh Gheini (Chair, 2022), Wenxuan Zhou (2022), Xisen Jin (2022), Alexander Spangher (Chair, 2022)

Dissertation Proposal Committee: Austin Matthews (CMU, 2018), Marjan Ghazvinine-jad (2019), Nima Pourdamghani (2019), Xing Shi (2019), Victor Martinez (2020), Karan Singla (2020), Xusen Yin (Chair, 2021), Sami Abu-El-Haija (2021), Aida Mostafazadeh Davani (2021), Nada Aldarrab (Chair, 2021), Yury Zemlyanskiy (2021), Brendan Kennedy (2021), Thamme Gowda (Chair, 2022), Jacqueline Brixey (2022)

Dissertation Defense Committee: Austin Matthews (CMU, 2019), Marjan Ghazvinine-jad (2019), Nima Pourdamghani (2019), Xing Shi (2019), Xusen Yin (Chair, 2021), Karan Singla (2021), Sami Abu-el-Haija (2022), Thamme Gowda (Chair, 2022), Nada Aldarrab (Chair, 2022)

MS Thesis Committee: Nada Aldarrab (2017)

Ph.D Fellowship Committee: 2017–2019

Research Assistant Professor Appointment Committee: 2018–2020

## Professional Activity

Senior Area Chair, Semantics, AACL-IJCNLP 2022

Senior Area Chair, Theme track, EMNLP 2022

Area Chair, Machine Translation and Multilinguality, AACL 2020

Publication Chair, \*SEM 2020

Area Chair, Semantics, ACL 2020

Area Chair, Multilinguality, ACL 2019

Symposium Co-Organizer, SoCalNLP 2019

Treasurer, NAACL, 2019–2022

Handbook Chair, NAACL HLT 2018

Symposium Co-Organizer, WeCNLP 2018

Area Chair, Semantics, NAACL HLT 2018

Workshop Co-Organizer, SemEval 2018, SemEval 2019

Task Organizer, Task 9 (AMR Parsing and Generation), SemEval 2017

Task Organizer, Task 8 (Meaning Representation Parsing), SemEval 2016

Local Organizer, NACLO 2015-present

Social Media Chair, NAACL HLT 2015

Program Committee, AAAI, ACL, EACL, EMNLP, NAACL, NIPS, AMTA, IJCNLP, CIAA, NACLO, \*SEM, SemEval proposals, ACL Rolling Review

Reviewer, MIT Press, TACL, Computational Linguistics, Journal of Machine Learning, NSF, NSF-BSF, ANR (France), NWO (Netherlands)

Local Chair for NAACL HLT 2010 (with David Chiang, Jason Riesa, Ed Hovy)

Coordinator, ISI Natural Language Seminar (2006-7)

#### INVITED TALKS

"Multi-Lingual Meta-Learning".

Amazon Machine Learning Conference Workshop on Multilingual NLP (virtual) Oct. 2022

"Rethinking Assumptions in Multilingual NLP."

Amazon Machine Learning Conference Workshop on Multilingual NLP (virtual)  ${\it Oct.}~2021$ 

"Translation For All".

USC AI Futures Symposium on Artificial Intelligence and Data Science (virtual) May 2021

"Theory of Mind and Intent in Procedural Agents: Learning Lessons from Improvisational Theater and Text-based Adventure Games".

University of Pennsylvania (virtual; class guest lecture)

Apr. 2022

University of Illinois at Urbana-Champaign (virtual)

Jun. 2020

"Resource-Constrained Neural Machine Translation".

Arizona State University, Phoenix, AZ

Jan. 2020

"Machine Translation: 350 years of progress and new challenges in the connectionist age".

Reed College, Portland, OR

Feb. 2019

AIHacks High School Hackathon, Playa del Rey, CA

Jun. 2019

"How I Learned to Stop Worrying and Love Evaluations".

Johns Hopkins University, Baltimore, MD

Nov. 2016

University of Pennsylvania, Philadelphia, PA

Nov. 2016

"The Machine Learning of Machine Translation".

University of Southern California, Los Angeles, CA

Aug. 2015

"Using Syntax-Based Machine Translation to Parse English into Abstract Meaning Representation".

University of Edinburgh, Edinburgh, UK

Mar. 2015

"Machine Translation: How it Works, Why it's Hard, and How To Make it Better". Bloomberg, London, UK Mar. 2015 University of Edinburgh, Edinburgh, UK Mar. 2015 "Toward User-Focused NLP". USC-ISI, Marina del Rey, CA Feb. 2014 "Models of Translation Competitions". USC-ISI, Marina del Rey, CA Aug. 2013 "Tuning As Ranking". USC-ISI, Marina del Rey, CA Jul. 2011 "Natural Language Processing and Weighted Finite-State Machines". Umeå University, Umeå, Sweden Oct. 2008 "Syntactic Re-Alignment Models for Machine Translation". University of California, Berkeley, CA Apr. 2008 "Bisimulation Minimisation for Weighted Tree Automata". Dresden University of Technology, Dresden, Germany Jun. 2007 Outstanding Paper Award, NAACL, 2022 Outstanding Reviewer, EMNLP, 2020 ISI Research Award (\$100,000), "Universal Translators for Asylum Seekers at the Border", 2020 Best Demo Award, ACL, 2018 Outstanding Paper Award, NAACL, 2018 USC School of Engineering Doctoral Fellowship, 2004–2008 University of Pennsylvania, Department of Engineering and Applied Sciences Faculty Appreciation Award, 2001 Rear Admiral Grace Murray Hopper Endowed Scholarship, 1999–2001 Dean's List, 1997-1999

Miscellaneous

Honors and

AWARDS

Outside Interests: Public Transit, Urban Development, Bicycling, Gardening

Date of Birth: August 7, 1978

Citizenship: United States, Germany