

# Jungo Kasai

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CONTACT INFORMATION	Paul G. Allen School of CSE University of Washington 185 Stevens Way Seattle, WA 98195, USA	<a href="mailto:jkasai@cs.washington.edu">jkasai@cs.washington.edu</a> <a href="https://homes.cs.washington.edu/~jkasai/">https://homes.cs.washington.edu/~jkasai/</a>
EMPLOYMENT EXPERIENCE	<b>Research Assistant</b> with Noah A. Smith University of Washington	09/2018 - <i>present</i>
	<b>Research Intern</b> with Keisuke Sakaguchi and Ronan Le Bras Allen Institute for Artificial Intelligence	07/2021 - 9/2022
	<b>Research Intern</b> with Yizhe Zhang and Yi Mao Microsoft AI	07/2020 - 9/2020
	<b>Research Intern</b> with James Cross Facebook AI	09/2019 - 01/2020
	<b>Research Intern</b> with Yunyao Li and Kun Qian IBM Research-Almaden	05/2018 - 09/2018
	<b>Research Assistant</b> with Dragomir Radev, Robert Frank, and Owen Rambow Yale University	05/2016 - 05/2018
EDUCATION	<b>University of Washington, Seattle, WA</b> Ph.D. in Computer Science and Engineering <i>Advisor: Noah A. Smith</i>	2018 - 2023 (expected)
	<b>Yale University, New Haven, CT</b> B.S. in Statistics <i>Magna Cum Laude, Phi Beta Kappa, Distinction in the Major</i>	2013 - 2017
HONORS AND AWARDS	Best Paper Award at NAACL, 2022 IBM Ph.D. Fellowship, 2020 Masason Foundation Scholarship, 2018 Funai Overseas Scholarship, 2017 Richter Fellowship, Yale University, 2016 Herb Scarf Summer Research Fellowship, Yale University, 2016 Richard U. Light Fellowship, Yale University, 2014-2015 Gold Medal in the Japanese Philosophy Olympiad, 2011-2012	

- INVITED TALKS**
- Democratized Natural Language Processing: Efficiency, Evaluation, and Beyond*
    - Apple Knowledge Platform. December, 2022.
    - Tohoku University. January, 2022.
    - Toyota Technological Institute at Chicago. February, 2023.
    - Microsoft Research. February, 2023.
  - Transparent and Dynamic Evaluation for Natural Language Processing*
    - Apple Intelligent System Experience. September, 2022.
  - Twist Decoding: Diverse Generators Guide Each Other*
    - University of Lisbon/Unbabel. June, 2022.
  - Bidimensional Leaderboards: Generate and Evaluate Language Hand in Hand*
    - Georgia Institute of Technology. December, 2021.
  - Finetuning Pretrained Transformers into RNNs*
    - Microsoft. April, 2021.
    - MLOps, Production & Engineering New York. April, 2021.
  - Deep Encoder, Shallow Decoder: Reevaluating Non-autoregressive Machine Translation*
    - NLP Colloquium, Japan. July, 2021.
  - Low-resource Deep Entity Resolution*
    - IBM AI Horizons Seminar Series. September, 2019.
  - Neural Network-based Supertagging and Parsing of Tree-Adjoining Grammars*
    - Heinrich Heine University of Düsseldorf. December, 2018.
    - Interactions Lab. December, 2017.

<b>MENTORING</b>	Haoxin (Allan) Li [25] – B.S., UW CSE	05/2022 - present
	Hongjin Su [1] – B.S., the Chinese University of Hong Kong → Ph.D. student at the University of Hong Kong CS	10/2021 - present
	Chi-Liang Liu – M.S., National Taiwan University	09/2022 - present
	Jiayi Xin [1] – B.S., University of Hong Kong CS	10/2021 - 04/2022
	Lavinia Dunagan [5, 6] – B.S., UW CSE → Ph.D. student at the University of Michigan iSchool	09/2021 - 06/2022
	Jacob Morrison [5, 6] – M.S., UW Linguistics → Predoctoral young investigator at the Allen Institute for AI	09/2021 - 06/2022
	Ivan Montero [4] – B.S., UW CSE → Machine learning engineer at Apple	06/2021 - 06/2022
	Ryan Li – B.S., UW CSE	03/2022 - 06/2022
	Xinyan (Velocity) Yu [11, 13, 26] – B.S., UW CSE → AI resident at Meta AI	09/2020 - 04/2021
	Leo (Zeyu) Liu [10] – M.S., UW CSE → AI resident at Meta AI	02/2020 - 06/2021
	Chi-Hsun (Sean) Hung – B.S., UW CSE	10/2018 - 05/2019

<b>TEACHING EXPERIENCE</b>	<b>Teaching Assistant</b> at the Paul G. Allen School of CSE, UW	
	NLP Capstone	Spring 2021
	Natural Language Processing (Graduate Level)	Winter 2019

**Guest Lecturer** at the Simpson Center for the Humanities, UW  
Machine Translation: Its History, Revolution, and Future Prospects      Spring 2021

**Guest Lecturer** at the Paul G. Allen School of CSE, UW  
Dependency Parsing      Winter 2019

**Teaching Assistant** at the Department of CS, Yale University  
Natural Language Processing      Spring 2017

**PROFESSIONAL SERVICE**      Program committee member/reviewer: ACL Rolling Review (2021–*present*), ACL (2021–2022), EMNLP (2021–2022), NAACL (2022), NeurIPS (2021–2022), ICML (2021–2023), ICLR (2022–2023), MIA (2022).

**REFEREED CONFERENCE PUBLICATIONS**

[1] Hongjin Su, **Jungo Kasai**, Chen Henry Wu, Weijia Shi, Tianlu Wang, Jiayi Xin, Rui Zhang, Mari Ostendorf, Luke Zettlemoyer, Noah A. Smith, and Tao Yu. Selective Annotation Makes Language Models Better Few-Shot Learners. In *Proceedings of the International Conference on Learning Representations (ICLR)*, 2023.

[2] **Jungo Kasai**, Keisuke Sakaguchi, Ronan Le Bras, Hao Peng, Ximing Lu, Dragomir Radev, Yejin Choi, and Noah A. Smith. Twist Decoding: Diverse Generators Guide Each Other. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2022.

[3] Daniel Khashabi, Gabriel Stanovsky, Jonathan Bragg, Nicholas Lourie, **Jungo Kasai**, Yejin Choi, Noah A. Smith, and Daniel S. Weld. GENIE: Toward Reproducible and Standardized Human Evaluation for Text Generation. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2022.

[4] Michael Hassid, Hao Peng, Daniel Rotem, **Jungo Kasai**, Ivan Montero, Noah A. Smith, and Roy Schwartz. How Much Does Attention Actually Attend? Questioning the Importance of Attention in Pretrained Transformers. In *Findings of the Association for Computational Linguistics: EMNLP 2022*, 2022.

[5] **Jungo Kasai**, Keisuke Sakaguchi, Ronan Le Bras, Lavinia Dunagan, Jacob Morrison, Alexander R. Fabbri, Yejin Choi, and Noah A. Smith. Bidimensional Leaderboards: Generate and Evaluate Language Hand in Hand. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2022.

[6] **Jungo Kasai**, Keisuke Sakaguchi, Lavinia Dunagan, Jacob Morrison, Ronan Le Bras, Yejin Choi, and Noah A. Smith. Transparent Human Evaluation for Image Captioning. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2022.

[7] Ximing Lu, Sean Welleck, Peter West, Liwei Jiang, **Jungo Kasai**, Daniel Khashabi, Ronan Le Bras, Lianhui Qin, Youngjae Yu, Rowan Zellers, Noah A. Smith, and Yejin Choi. NeuroLogic A\*esque Decoding: Constrained Text Generation with Lookahead Heuristics. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2022. **Best Paper Award.**

[8] Hao Peng, **Jungo Kasai**, Nikolaos Pappas, Dani Yogatama, Zhaofeng Wu, Lingpeng Kong, Roy Schwartz, and Noah A. Smith. ABC: Attention with Bounded-memory Control. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics (ACL)*, 2022.

- [9] **Jungo Kasai**, Hao Peng, Yizhe Zhang, Dani Yogatama, Gabriel Ilharco, Nikolaos Pappas, Yi Mao, Weizhu Chen, and Noah A. Smith. Finetuning Pretrained Transformers into RNNs. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2021.
- [10] Leo Z. Liu, Yizhong Wang, **Jungo Kasai**, Hannaneh Hajishirzi, and Noah A. Smith. Probing Across Time: What Does RoBERTa Know and When?. In *Findings of the Association for Computational Linguistics: EMNLP 2021*, 2021.
- [11] Akari Asai, Xinyan Yu, **Jungo Kasai**, and Hanna Hajishirzi. One Question Answering Model for Many Languages with Cross-lingual Dense Passage Retrieval. In *Proceedings of Advances in Neural Information Processing Systems (NeurIPS)*, 2021.
- [12] **Jungo Kasai**, Nikolaos Pappas, Hao Peng, James Cross, and Noah A. Smith. Deep Encoder, Shallow Decoder: Reevaluating the Speed-Quality Tradeoff in Machine Translation. In *Proceedings of the Conference of the International Conference on Learning Representations (ICLR)*, 2021.
- [13] Akari Asai, **Jungo Kasai**, Jonathan H. Clark, Kenton Lee, Eunsol Choi, and Hannaneh Hajishirzi. XOR QA: Cross-lingual Open-Retrieval Question Answering. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistic (NAACL)*, 2021.
- [14] Farhad Akhbardeh, Arkady Arkhangorodsky, Magdalena Biesialska, Ondřej Bojar, Rajen Chatterjee, Vishrav Chaudhary, Marta R. Costa-jussa, Cristina España-Bonet, Angela Fan, Christian Federmann, Markus Freitag, Yvette Graham, Roman Grundkiewicz, Barry Haddow, Leonie Harter, Kenneth Heafield, Christopher Homan, Matthias Huck, Kwabena Amponsah-Kaakyire, **Jungo Kasai**, Daniel Khashabi, Kevin Knight, Tom Kocmi, Philipp Koehn, Nicholas Lourie, Christof Monz, Makoto Morishita, Masaaki Nagata, Ajay Nagesh, Toshiaki Nakazawa, Matteo Negri, Santanu Pal, Allahsera Auguste Tapo, Marco Turchi, Valentin Vydryn, and Marcos Zampieri. Findings of the Conference on Machine Translation (WMT21). In *Proceedings of the Conference on Machine Translation (WMT)*, 2021.
- [15] **Jungo Kasai**, James Cross, Marjan Ghazvininejad, and Jiatao Gu. Non-Autoregressive Machine Translation with Disentangled Context Transformer. In *Proceedings of the International Conference on Machine Learning (ICML)*, 2020.
- [16] Phoebe Mulcaire,\* **Jungo Kasai**,\* and Noah A. Smith. Low-Resource Parsing with Crosslingual Contextualized Representations. In *Proceedings of the Conference on Computational Natural Language Learning (CoNLL)*, 2019. \* = equal contribution.
- [17] **Jungo Kasai**, Kun Qian, Sairam Gurajada, Yunyao Li, and Lucian Popa. Low-resource Deep Entity Resolution with Transfer and Active Learning. In *Proceedings of the Annual Meeting of the Association for Computational Linguistics (ACL)*, 2019.
- [18] **Jungo Kasai**, Dan Friedman, Robert Frank, Dragomir Radev, and Owen Rambow. Syntax-aware Neural Semantic Role Labeling with Supertags. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistic (NAACL)*, 2019.
- [19] Phoebe Mulcaire, **Jungo Kasai**, and Noah A. Smith. Polyglot Contextual Representations Improve Crosslingual Transfer. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistic (NAACL)*, 2019.
- [20] Michihiro Yasunaga, **Jungo Kasai**, Rui Zhang, Alexander R. Fabbri, Irene Li, Dan Friedman, and Dragomir R. Radev. ScisummNet: A Large Annotated Corpus and Content-Impact Models for Scientific Paper Summarization with Citation Networks. In *Proceedings of the Conference of the Conference on Artificial Intelligence (AAAI)*, 2019.

- [21] **Jungo Kasai** and Robert Frank. Jabberwocky Parsing: Dependency Parsing with Lexical Noise. In *Proceedings of the Society for Computation in Linguistics (SCiL)*, 2019.
- [22] **Jungo Kasai**, Robert Frank, Pauli Xu, William Merrill, and Owen Rambow. End-to-end Graph-based TAG Parsing with Neural Networks. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistic (NAACL)*, 2018.
- [23] Michihiro Yasunaga, **Jungo Kasai**, and Dragomir Radev. Robust Multilingual Part-of-Speech Tagging via Adversarial Training. In *Proceedings of the Conference of the North American Chapter of the Association for Computational Linguistic (NAACL)*, 2018.
- [24] **Jungo Kasai**, Robert Frank, R. Thomas McCoy, Owen Rambow, and Alexis Nasr. TAG Parsing with Neural Networks and Vector Representations of Supertags. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2017.

#### PREPRINTS

- [25] Haoxin Li, Phillip Keung, Daniel Cheng, **Jungo Kasai**, and Noah A. Smith. NarrowBERT: Accelerating Masked Language Model Pretraining and Inference. Under review, 2023.
- [26] **Jungo Kasai**, Keisuke Sakaguchi, Yoichi Takahashi, Ronan Le Bras, Akari Asai, Xinyan Yu, Dragomir Radev, Noah A. Smith, Yejin Choi, and Kentaro Inui. RealTime QA: What’s the Answer Right Now? Under review, 2022.
- [27] **Jungo Kasai**, Keisuke Sakaguchi, Ronan Le Bras, Dragomir Radev, Yejin Choi, and Noah A. Smith. Beam Decoding with Controlled Patience. Under review, 2022.
- [28] Simeng Han, Hailey Schoelkopf, Yilun Zhao, Zhenting Qi, Martin Riddell, Luke Benson, Lucy Sun, Ekaterina Zubova, Yujie Qiao, Matthew Burtell, David Peng, Jonathan Fan, Yixin Liu, Brian Wong, Malcolm Sailor, Ansong Ni, Linyong Nan, **Jungo Kasai**, Tao Yu, Rui Zhang, Shafiq Joty, Alexander R. Fabbri, Wojciech Kryscinski, Xi Victoria Lin, Caiming Xiong, and Dragomir Radev. FOLIO: Natural Language Reasoning with First-Order Logic. Under review, 2022.

#### REFEREED WORKSHOP PUBLICATIONS

- [29] Akari Asai, Shayne Longpre, **Jungo Kasai**, Chia-Hsuan Lee, Rui Zhang, Junjie Hu, Ikuya Yamada, Jonathan H. Clark, and Eunsol Choi. MIA 2022 Shared Task: Evaluating Cross-lingual Open-Retrieval Question Answering for 16 Diverse Languages. In *Proceedings the Workshop on Multilingual Information Access (MIA)*, 2022.
- [30] Jeff Da and **Jungo Kasai**. Cracking the Contextual Commonsense Code: Understanding Commonsense Reasoning Aptitude of Deep Contextual Representations. In *Proceedings the Workshop on Commonsense Inference in Natural Language Processing (COIN)*, 2019.
- [31] Dan Friedman,\* **Jungo Kasai**,\* R. Thomas McCoy,\* Robert Frank, Owen Rambow, and Forrest Davis. Linguistically Rich Vector Representations of Supertags for TAG Parsing. In *Proceedings of the Workshop on Tree Adjoining Grammars and Related Formalisms (TAG+)*, 2017.
- [32] Pauli Xu, Robert Frank, Jungo Kasai, and Owen Rambow TAG Parsing Evaluation using Textual Entailment. In *Proceedings of the Workshop on Tree Adjoining Grammars and Related Formalisms (TAG+)*, 2017.

**OTHER  
PUBLICATIONS**

- [33] Yuhei Kasai, **Jungo Kasai**, Takayuki Kitai, Junji Morita, and Tsutomu Fujita. Iatrogenic left ventricular pseudoaneurysm after successful radiofrequency catheter ablation for premature ventricular contraction originating from the posterior papillary muscles. *Circulation Journal*, 2022.
- [34] Takayuki Kitai, Yuhei Kasai, **Jungo Kasai**, Junji Morita, and Tsutomu Fujita. Mediastinal Hematoma Associated With Radiofrequency Catheter Ablation of Atrial Fibrillation. *Circulation Journal*, 2022.
- [35] Yuhei Kasai, **Jungo Kasai**, So Asano, Takahiko Nagase, Yukio Sekiguchi, and Junichi Nitta. Removing pericardial drainage tube for acute cardiac tamponade associated with catheter ablation of atrial fibrillation can trigger hemoperitoneum from severe liver bleeding. *Heart Rhythm Case Reports*, 2022.
- [36] Yuhei Kasai, **Jungo Kasai**, Syuichi Sahashi, Sandeep Shakya, Hiroki Kuji, Naoki Hayakawa, Kotaro Miyaji, and Junji Kanda. Revisiting where to apply preimplant mapping to improve P-wave sensing of insertable cardiac monitors. *Journal of Arrhythmia*, 2022.
- [37] Yuhei Kasai, **Jungo Kasai**, Yukio Sekiguchi, Takahiko Nagase, and Junichi Nitta. Idiopathic premature ventricular contractions originating from the distal Purkinje fiber network of the right bundle branch.. *Journal of Arrhythmia*, 2022.
- [38] Yuhei Kasai, **Jungo Kasai**, Yukio Sekiguchi, So Asano, Hiroshi Fukunaga, Takahiko Nagase, and Junichi Nitta. Apple Watch facilitates single-session catheter ablation of coexisting atrioventricular nodal reentrant tachycardia and atrioventricular reentrant tachycardia. *Clinical Case Reports*, 2021.

**SKILLS**

Software: Python, TensorFlow, PyTorch, Theano, Lua, Torch7, Linux, Matlab, R  
Languages: Japanese (native), Mandarin Chinese (intermediate proficiency)

**REFERENCES**

**Noah A. Smith** (Doctoral Advisor)  
Amazon Professor of Machine Learning  
Senior Research Manager  
nasmith@cs.washington.edu  
UW Paul G. Allen School of CSE  
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**Yejin Choi**  
Brett Helsel Professor  
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**Dragomir Radev**  
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