JAEHUN JUNG

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CURRENT AFFILIATIONS

University of Washington, Seattle, WA
Ph.D in Computer Science and Engineering
Advisor: Yejin Choi

Sep 2021 ~ Present

Nvidia Research, Seattle, Washington
Student Researcher
Data synthesis and quality estimation for pre-/post-training frontier language models.

Sep 2024 ~ Present

RESEARCH INTERESTS

I am broadly interested in *how to train and evaluate a model with a model.* I often think about:
- Data Synthesis / Selection with LMs: How do we define good data? Can we use the insight to generate synthetic data that are diverse, correct, and are helpful to model generalization?
- Science of (Automated) Evals: Can we use a model to reliably evaluate other models? How can we guarantee the automated rubrics will align with ours?

RESEARCH WORKS

Jaehun Jung, Seungju Han*, Ximing Lu*, Skyler Hallinan*, Shrimai Prabhumoye, Niklas Muennighoff, Mostafa Patwary, Mohammad Shoeybi, Bryan Catanzaro, Yejin Choi. **Prismatic Synthesis & G-Vendi Score: How Data Diversification makes R1-32B a Better Teacher than R1-671B.** *Blog, 2025.*

Ximing Lu*, Seungju Han*, David Acuna Marrerro*, Hyunwoo Kim*, Jaehun Jung*, Shrimai Prabhumoye, Niklas Muennighoff, Mostafa Patwary, Mohammad Shoeybi, Bryan Catanzaro, Yejin Choi. **Retro-Search: Exploring Untaken Paths for Deeper and Efficient Reasoning.** *Preprint, 2025.*

Jaehun Jung, Faeze Brahman, Yejin Choi. **Trust or Escalate: LLM Judges with Provable Guarantees for Human Agreement.** *In Proceedings of International Conference on Learning Representations (ICLR 2025, **Oral**).*

Jaehun Jung, Ximing Lu, Liwei Jiang, Faeze Brahman, Peter West, Pang Wei Koh, Yejin Choi. **Information-Theoretic Distillation for Reference-less Summarization.** *In Proceedings of Conference on Language Modeling (COLM 2024).*

Jaehun Jung, Peter West, Liwei Jiang, Faeze Brahman, Ximing Lu, Jillian Fisher, Taylor Sorensen, Yejin Choi. **Impossible Distillation: from Low-Quality Model to High-Quality Dataset and Model for Summarization and Paraphrasing.** *In Proceedings of The 2024 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2024).*

Jillian Fisher, Ximing Lu, Jaehun Jung, Liwei Jiang, Zaid Harchaoui, Yejin Choi. **JamDec: Unsupervised Authorship Obfuscation using Constrained Decoding over Small Language Models** *In Proceedings of The 2024 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2024, **Oral**).*

Ximing Lu, Faeze Brahman, Peter West, Jaehun Jung, ..., Yejin Choi. **Inference-Time Policy Adapters (IPA): Tailoring Extreme-Scale LMs without Fine-tuning.** *In Proceedings of The 2023 Conference on Empirical Methods for Natural Language Processing (EMNLP 2023).*

Skyler Hallinan, Faeze Brahman, Ximing Lu, Jaehun Jung, Sean Welleck, Yejin Choi. **STEER: Unified Style Transfer with Expert Reinforcement.** *In Findings of Association of Computational Linguistics: EMNLP 2023 (Findings of EMNLP 2023).*

Guhyun Han, Jaehun Jung, YoungHo Kim, Jinwook Seo. **DataHalo: Customizable Visualization System to Embody Personal Design Perspectives of Ambience.** *In Proceedings of The 2023 CHI Conference on Human Factors in Computing Systems (CHI 2023).*

<u>Jaehun Jung</u>, Lianhui Qin, Sean Welleck, Faeze Brahman, Chandra Bhagavatula, Ronan Le Bras, Yejin Choi. **Maieutic Prompting: Logically Consistent Reasoning with Recursive Explanations.** *In Proceedings of The 2022 Conference on Empirical Methods for Natural Language Processing (EMNLP 2022, Oral).*

<u>Jaehun Jung</u>, Jinhong Jung, U Kang. **T-GAP: Learning to Walk across Time for Temporal Knowledge Graph Completion.** *In Proceedings of The 27th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2021).*

<u>Jaehun Jung</u>, Bokyung Son*, Sungwon Lyu*. **AttnIO: Knowledge Graph Exploration with In-and-Out Attention Flow for Knowledge-Grounded Dialogue.** *In Proceedings of The 2020 Conference on Empirical Methods for Natural Language Processing (EMNLP 2020).*

EDUCATION	**Seoul National University,** Seoul, Korea B.S. in Computer Science and Engineering Advisor: U Kang, Jinwook Seo *Graduated with Presidential Award (1st in School of Engineering)*	Mar 2014 ~ Feb 2021
PREVIOUS AFFILIATIONS	**Allen Institute of AI**, Seattle, Washington External Collaborator Research with Mosaic Team on commonsense reasoning and distillation	Sep 2021 ~ Sep 2024
	Kakao Enterprise, Seoul, Korea NLP Researcher Trained a fast language detection model for Neural Machine Translation. Research on domain-specific NMT for patent documents.	Apr 2020 ~ Jul 2021
	Kakao AI Lab, Seoul, Korea Research Intern Proposed a new approach to knowledge graph exploration for a knowledge-grounded dialogue system.	Jan 2020 ~ Mar 2020
	Data Mining Lab, Seoul National University Undergraduate Research Program (URP) Advisor: Prof. U Kang Proposed a temporal reasoning model based on attention propagation and GNN, achieving state-of-the-art results in temporal knowledge graph completion benchmarks.	Mar 2020 ~ Jun 2020
	Human-Computer Interaction Lab, Seoul National University Research Intern Advisor: Prof. Jinwook Seo Designed user-context aware notification system that outputs personalized summary of smartphone notifications.	Mar 2018 ~ Dec 2019
	SNULife, Seoul National University CTO Developed new services and led maintenance for SNULife.com, an online student community with 170k+ users.	May 2018 ~ Mar 2019
	Police Tactical Unit, Daegu Metropolitan Police Agency Auxiliary Police, HR Department (Mandatory Military Service) Developed Human Resource DBMS, currently deployed to nationwide police agencies.	Mar 2015 ~ Feb 2017
SCHOLARSHIPS	**Outstanding Thesis Award,** Seoul National University	2021
	National Scholarship for Science and Engineering Merit-based full stipend scholarship by KOSAF (*Korean Student Aid Foundation*)	2018 ~ 2020
	Academic Excellence Scholarship, Seoul National University Merit-based undergraduate scholarship.	2014, 2015, 2017