Yuekun Yao

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Education

- **Saarland University** — Saarbrücken, DE
  Ph.D. in Department of Language Science and Techonology — *Aug. 2020 – Present*
  - Supervisor: Alexander Koller
  - Thesis title: Examining, Improving and Estimating Compositional Generalization in Neural Semantic Parsing
- **University of Edinburgh** — Edinburgh, UK
  Master of science in Artificial Intelligence — *Sept. 2018 – Sept. 2019*
  - First Class with distinction
  - Thesis supervisor: Ivan Titov
  - Thesis title: Exploit Higher-order Information in Predicted Arguments for Semantic Role Labeling
- **East China Normal University** — Shanghai, China
  Bachelor of Engineering in Computer Science — *Sept. 2014 – June. 2018*
  - Major GPA: 3.80/4.0
  - Thesis supervisor: Yuanbin Wu

Publications List

- **Yuekun Yao**, Yupei Du, Dawei Zhu, Michael Hahn, and Alexander Koller. Language models can learn implicit multi-hop reasoning, but only if they have lots of training data. *arXiv preprint arXiv:2505.17923*, 2025. **(EMNLP 2025)**
- Yupei Du, Philipp Mondorf, Silvia Casola, **Yuekun Yao**, Robert Litschko, and Barbara Plank. Reason to rote: Rethinking memorization in reasoning, 2025. **(EMNLP 2025)**
- Xiulin Yang, Tatsuya Aoyama, **Yuekun Yao**, and Ethan Wilcox. Anything goes? a crosslinguistic study of (im) possible language learning in lms. *arXiv preprint arXiv:2502.18795*, 2025. **(ACL 2025)**
- **Yuekun Yao** and Alexander Koller. Predicting generalization performance with correctness discriminators. In Yaser Al-Onaizan, Mohit Bansal, and Yun-Nung Chen, editors, *Findings of the Association for Computational Linguistics: EMNLP 2024*, pages 11725–11739, Miami, Florida, USA, November 2024. Association for Computational Linguistics. **(EMNLP 2024 findings)**
- **Yuekun Yao** and Alexander Koller. Simple and effective data augmentation for compositional generalization. In Kevin Duh, Helena Gomez, and Steven Bethard, editors, *Proceedings of the 2024 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers)*, pages 434–449, Mexico City, Mexico, June 2024. Association for Computational Linguistics. **(NAACL 2024)**
- Bingzhi Li, Lucia Donatelli, Alexander Koller, Tal Linzen, **Yuekun Yao**, and Najoung Kim. SLOG: A structural generalization benchmark for semantic parsing. In Houda Bouamor, Juan Pino, and Kalika Bali, editors, *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*, pages 3213–3232, Singapore, December 2023. Association for Computational Linguistics. **(EMNLP 2023)**
- **Yuekun Yao** and Alexander Koller. Structural generalization is hard for sequence-to-sequence models. In Yoav Goldberg, Zornitsa Kozareva, and Yue Zhang, editors, *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*, pages 5048–5062, Abu Dhabi, United Arab Emirates, December 2022. Association for Computational Linguistics. **(EMNLP 2022)**

- **Yuekun Yao** and Barry Haddow. Dynamic masking for improved stability in online spoken language translation. In Michael Denkowski and Christian Federmann, editors, *Proceedings of the 14th Conference of the Association for Machine Translation in the Americas (Volume 1: Research Track)*, pages 123–136, Virtual, October 2020. Association for Machine Translation in the Americas. **(AMTA 2020)**
- Dominik Macháček, Jonáš Kratochvíl, Sangeet Sagar, Matúš Žilinec, Ondřej Bojar, Thai-Son Nguyen, Felix Schneider, Philip Williams, and **Yuekun Yao**. ELITR non-native speech translation at IWSLT 2020. In Marcello Federico, Alex Waibel, Kevin Knight, Satoshi Nakamura, Hermann Ney, Jan Niehues, Sebastian Stüker, Dekai Wu, Joseph Mariani, and Francois Yvon, editors, *Proceedings of the 17th International Conference on Spoken Language Translation*, pages 200–208, Online, July 2020. Association for Computational Linguistics. **(IWSLT 2020)**
- Tao Ji, **Yuekun Yao**, Qi Zheng, Yuanbin Wu, and Man Lan. Ecnu at epe 2017: Universal dependencies representations parser. In *Proceedings of the 2017 Shared Task on Extrinsic Parser Evaluation at the Fourth International Conference on Dependency Linguistics and the 15th International Conference on Parsing Technologies. Pisa, Italy*, pages 40–46, 2017

Experience

- **University of Edinburgh** — Edinburgh, UK
  Research assistant — *Nov. 2019 – May. 2020*
- **PingAn Technology** — Shanghai, China
  Server Engineer Intern — *Sept. 2017 – Dec. 2017*

Skill

Programming Languages: Python, Bash, Latex

Technological Skills: PyTorch, Numpy