Qing Lyu

RESEARCH INTERESTS

Natural Language Processing, Computational Linguistics, Interpretability, Robustness, Probing Language Models

EDUCATION

University of Pennsylvania, Philadelphia, USA

Aug 2019 – Present GPA: 4.00/4.00

Ph.D. Computer and Information Science

Advisor: Chris Callison-Burch and Marianna Apidianaki **Tsinghua University**, Beijing, China

Sept 2015 - Jul 2019

B.A. English Language and Literature (Linguistics track)

GPA: 3.88/4.00

Advisor: Xiaojing Bai

PUBLICATIONS AND MANUSCRIPTS [11] **Q. Lyu**, M. Apidianaki, C. Callison-Burch. *Towards Faithful Model Explanation in NLP: A Survey.*

In preprint.

[10] **Q. Lyu**, H. Zheng, D. Li, L. Zhang, M. Apidianaki, C. Callison-Burch. *Is "My Favorite New Movie" My Favorite Movie? Probing the Understanding of Recursive Noun Phrases.* In **NAACL 2022**.

[9] A. Srivastava, ..., L. Zhang, **Q. Lyu**, C. Callison-Burch, ... *Beyond the Imitation Game: Quantifying and extrapolating the capabilities of language models.*

In preprint.

[8] X. Du, Z. Zhang, S. Li, P. Yu, H. Wang, T. Lai, X. Lin, Z. Wang, I. Liu, B. Zhou, H. Wen, M. Li, D. Hannan, J. Lei, H. Kim, R. Dror, H. Wang, M. Regan, Q. Zeng, **Q. Lyu**, C. Yu, C. Edwards, X. Jin, Y. Jiao, G. Kazeminejad, Z. Wang, C. Callison-Burch, M. Bansal, C. Vondrick, J. Han, D. Roth, S. Chang, M. Palmer, H. Ji. *RESIN-11: Schema-guided Event Prediction for 11 Newsworthy Scenarios.*

In NAACL 2022 (demo track).

[7] S. Zhou*, L. Zhang*, Y. Yang, **Q. Lyu**, G. Neubig, C. Callison-Burch. *Show Me More Details: Discovering Event Hierarchies from WikiHow*. (*Equal contribution) In **ACL 2022**.

[6] Y. Yang, A. Panagopoulou, **Q. Lyu**, L. Zhang, M. Yatskar, C. Callison-Burch. *Visual Goal-Step Inference using wikiHow*.

In **EMNLP 2021**.

[5] **Q. Lyu**, H. Zhang, E. Sulem, D. Roth. *Zero-shot Event Extraction via Transfer Learning: Challenges and Insights.*

In ACL 2021.

[4] **Q. Lyu***, L. Zhang*, C. Callison-Burch. *Goal-Oriented Script Construction*. (*Equal contribution)

In **INLG 2021**.

[3] H. Wen, Y. Lin, T. Lai, X. Pan, S. Li, X. Lin, B. Zhou, M. Li, H. Wang, H. Zhang, X. Yu, A. Dong, Z. Wang, Y. Fung, P. Mishra, **Q. Lyu**, D. Surís, B. Chen, Susan W. Brown, M. Palmer, C. Callison-Burch, C. Vondrick, J. Han, D. Roth, S-F. Chang, H. Ji. *RESIN: A Dockerized Schema-Guided Cross-document Cross-lingual Cross-media Information Extraction and Event Tracking System*.

In NAACL 2021 (demo track).

[2] L. Zhang, **Q. Lyu**, C. Callison-Burch. *Intent Detection with WikiHow*. In **AACL-IJCNLP 2020**.

[1] L. Zhang*, Q. Lyu*, C. Callison-Burch. Reasoning about Goals, Steps, and Temporal *Ordering with WikiHow.* (*Equal contribution) In EMNLP 2020; Spotlight presentation at the Workshop on Enormous Language Models at ICLR 2021. • Program Committee member of the 9th Mid-Atlantic Student Colloquium SERVICES on Speech, Language and Learning (MASC-SLL) 2022 **AND ACTIVITIES** • Panelist at WiCS x FemmeHacks CIS PhD Panel 2022 2022 -• **Reviewer** for ACL Rolling Review (ARR) • **Reviewer** for the Beyond the Imitation Game Benchmark (BIG-BENCH), 2021 initiated by Google Research • Co-organizer of CLUNCH, Penn's NLP seminar series 2020 • Teaching Assistant — Computational Linguistics Fall 2021 **TEACHING EXPERIENCE** CIS 530: graduate level University of Pennsylvania • Teaching Assistant — Applied Machine Learning Fall 2019 CIS 419/519: undergraduate/graduate level University of Pennsylvania • Teaching Assistant — Computational Linguistics Fall 2018 undergraduate level Tsinghua University **INDUSTRY** Research Intern May 2022 - Aug 2022 **EXPERIENCE** Tencent, AI Lab Seattle, USA • Project: interpreting generation models (ongoing work). **Algorithm Intern** Sept 2018 - Oct 2018 Tomorrow Advancing Life (TAL) Education Group, AI Lab Beijing, China • Developed a model to predict the dropout rate of individual students in online courses, based on Linear Dynamical Systems (LDS). • Our model improved the dropout prediction F1 score by 20% over the existing system, and was officially launched as part of the online teaching platform. Excellent Graduation Thesis Award, Tsinghua University 2019 National Scholarship, Chinese Ministries of Education and Finance 2018

HONORS

3rd Place at "Sentiment analysis of Chinese Metaphor", Shared Task at the 17th China National Conference on Computational Linguistics (CCL 2018) 2018 Jiang Nanxiang Scholarship, Tsinghua University 2017 Merit-based Scholarship of all school years, Tsinghua University 2015 - 2019 First Prize (Individual Contest), National Linguistics Olympiad (NOL) 2014

Programming Skills SKILLS

Python, PyTorch, C/C++, SQL, MATLAB

Language Skills

Chinese (native), English (proficient), French (conversational)

GRE (2018): Verbal 168, Quantitative 170, Analytical Writing 4.0 **TEST SCORES** TOEFL (2018): Reading 30, Listening 30, Speaking 29, Writing 30