Qing Lyu

veronica320.github.io
lyuqing@sas.upenn.edu

RESEARCH INTERESTS

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

EDUCATION

University of Pennsylvania, Philadelphia, USA — Aug 2019 – Present
Ph.D. Computer and Information Science — GPA: 4.00/4.00
Advisor: Chris Callison-Burch

Tsinghua University, Beijing, China — Sept 2015 – Dec 2018
B.A. English Language and Literature (Linguistics track) — GPA: 3.88/4.00
Advisor: Xiaojing Bai

PUBLICATIONS AND MANUSCRIPTS

[8] **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 submission.

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

[6] Y. Yang, A. Panagopoulou, **Q. Lyu**, L. Zhang, M. Yatskar and C. Callison-Burch. *Visual Goal-Step Inference using wikiHow*.
In **EMNLP 2021**; presented at the 2nd Workshop on Advances in Language and Vision Research at NAACL 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* and 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** and C. Callison-Burch. *Intent Detection with WikiHow*.
In **AACL-IJCNLP 2020**.

[1] L. Zhang*, **Q. Lyu***, and 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.

SERVICES

- **Reviewer for the Beyond the Imitation Game Benchmark** (BIG-Bench) initiated by Google Research — 2021
- **Co-organizer of CLUNCH**, Penn's NLP seminar series, University of Pennsylvania — 2020

TEACHING EXPERIENCE

- **Teaching Assistant — Computational Linguistics** — Fall 2021
  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 EXPERIENCE

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.

• Gave a public talk on BERT and the attention mechanism in the paper sharing group, attended by the language, speech, and vision teams.

COURSES

Graduate

Operating Systems (A+), Fundamentals of Linear Algebra and Optimization (A+), Theory of Computation (A), PhD Independent Study (A+)

Undergraduate

Computational Linguistics (A-), Applied Machine Learning (A+), Computational Modeling of Biological Signals and Systems(A), Probability and Statistics (A-), Data Structures (A), Principal and Application of Database (A), Language Acquisition (A-), Psycholinguistics (A-), Language and Cognition (A), Introduction to Formal Pragmatics (A-), Introduction to Formal Semantics (A-), Introduction to Syntax (A), Introduction to Linguistics (A)

HONORS

Excellent Graduation Thesis Award, Tsinghua University	2019
National Scholarship, Chinese Ministries of Education and Finance	2018
3rd Place at "Sentiment analysis of Chinese Metaphor", Shared Task at the 17th China National	2018
Jiang Nanxiang Scholarship, Tsinghua University	2017
Merit-based Scholarship of all school years, Tsinghua University	2015 – 2019
Individual Contest First Prize, National Linguistics Olympiad (NOL)	2014

SKILLS

Programming Skills

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

Language Skills

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

TEST SCORES

GRE (2018): Verbal 168, Quantitative 170, Analytical Writing 4.0

TOEFL (2018): Reading 30, Listening 30, Speaking 29, Writing 30