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 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

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