Yuxuan Lu

luyuxuanleo@gmail.com · yuxuan-lu · https://yuxuan.lu ·

Education

Beijing University of Technology, Beijing, China Sep. 2019 – Present

Bachelor of Engineering in Computer Science and Technology, GPA 3.84/4.00 (90.07/100) , Junior year GPA 4.00

- Principle of Compiling 96 | Formal Language 96 | Principle of Operating System 95 | Operations Research 97 | Probability Theory 97 | Design and Analysis of Algorithms 99
- **TA in multiple major courses** (Course Design of System Software, Data Structure and Algorithm, etc.)
- **Won serval scholarships** at school and college levels
- **Lead our Programming Competition Team and Linux User Group**(**700+ students** participate in our activities every year)

Honors and Awards

Bronze Medal, 2021 ICPC Asia Regional Contest Shenyang Site 2021
Bronze Medal, 2020 ICPC Asia Regional Contest Yinchuan Site 2021
Global Rank 85(Top 3.5%), IEEEXtreme 15.0 2021
Bronze Medal, 2019 ICPC Asia Regional Contest Yinchuan Site 2020
Global Rank 42(Top 2%), IEEEXtreme 14.0 2020

Publications

- **Yuxuan Lu**, Jingya Yan, Zhixuan Qi, Zhongzheng Ge, and Yongping Du, Contextual embedding and model weighting by fusing domain knowledge on Biomedical Question Answering (*ACM-BCB 2022*, with *oral presentation*, arxiv: 2206.12866)
- Yongping Du, Jingya Yan, **Yuxuan Lu**, Yiliang Zhao, Xingnan Jin, Improving Biomedical Question Answering by Data Augmentation and Model Weighting (*IEEE/ACM Transactions on Computational Biology and Bioinformatics*, IF 3.71)
- Yongping Du, Jingya Yan, Yiliang Zhao, **Yuxuan Lu**, and Xingnan Jin, Dual Model Weighting Strategy and Data Augmentation in Biomedical Question Answering (*IEEE BIBM 2021*)
- Hao Chen, Lun Du, **Yuxuan Lu**, Qiang Fu, Xu Chen, Shi Han, Yanbin Kang, Guangming Lu and Zi Li, Heterogeneous knowledge enhanced Person-Job Fit (*WWW 2023 (CCF A)*, In review)
- Yongping Du, Yiliang Zhao, Jingya Yan, **Yuxuan Lu**, Wenyang Guo, Impacts of Multi-task Adversarial Training on Machine Reading Comprehension Model (*IEEE/ACM Transactions on Audio, Speech and Language Processing*, In review)

Research Intern Experience

Microsoft Research Asia & LinkedIn Beijing, China Jul. 2022 – Present

Machine Learning Researcher Manager: Guangming Lu (Manager) / Lun Du (Sr. Researcher)

Participated in a joint program between Microsoft Research Asia and LinkedIn, to discover AI applications driven by LinkedIn's large-scale high-quality production data

- Contextual Summary for User Profile Regarding Job Description (main contributor)

  - Conducted contextual summarization research on LinkedIn data, including collecting data, designing and evaluating the method, and designing experiments
  - Generate a summary for each candidate profile regarding each job description to help HR to know the candidates faster
- Heterogeneous Knowledge-based Person-Job Fit
  - Conducted Person-Job Fit research using heterogeneous GNN pre-training
  - Participated in method designing; responsible for collecting data and running baseline experiments; our paper is submitted to WWW 2023

Tsinghua NLP Lab (THUNLP) Dec. 2021 – Jun. 2022

Intern Research Assistant Superviser: Prof. Zhiyuan Liu, Dr. Huadong Wang

- Big Model for Knowledge Graph (BMKG)
  - Developed a toolkit to help **train large Knowledge Embedding models** on **large KGs** and **run various downstream tasks**
  - Supports **4 levels of parallel** during the training process of **translation-based or context-based** Knowledge Embedding models
  - Designed the framework and wrote code that needed high performance
- Design / Develop / Maintain multiple demos for NLP models
  - Designed and maintained multiple demos for NLP models to show their performance to non-specialists

Machine Reading Comprehension Dec. 2020 – Present

Research Assistant Superviser: Prof. Yongping Du

Supported by a **National-level undergraduate research program**

- Conducted Machine Reading Comprehension research in Biomedical Domain as the project leader, including designing the model, conducting experiments and writing the paper, which was **published in ACM BCB 2022**
- Designed a **contextual embedding** and **model weighting** strategy to **learn domain knowledge** in Biomedical Question Answering task, which **outformed SOTA models by a large margin**

Project Experience

Course Grading and Feedback System based on Fault-Cause analysis Apr. 2020 – Jun. 2022

Supported by a **National-level undergraduate research program**

- Worked as the project leader, who was responsible for including designing the system architecture, code reviewing, and full stack developing
- Designed an **autograding system** that can help daily teaching and **give accurate scores and feedback** based our **automatic fault-cause clustering method**; the system includes 60k+ lines of code, and 72% of them are covered by unit tests
- Acheved the performance that is capable of handling **500+ QPS** while other similar systems can only do 20+
- **Found a bug in the go compiler** (see golang/go#44614) Check https://yuxuan.lu to learn more

Miscellaneous

- Programming: Multilingual. Fluent in C++, Rust, Python, Go, JavaScript, etc.
- Blog (In Chinese): `http://leoleoasd.me`
- Personal Site: `http://yuxuan.lu`
- Languages: English - Fluent (TOEFL 105), Mandarin - Native speaker