Guoqing LUO

Mobile Phone: (+86)153-0862-7530 E-mail: frankluo007@gmail.com

No.299, Bayi Road, Wuhan University, Wuhan 430072, China

https://www.frankgqluo.xyz/

EDUCATION

Wuhan University Wuhan, China

B.S in Computer Science and Technology, School of Computer Science

Sept. 2017—Jun. 2021(expected)

• Cumulative GPA:

• Prize: National Second Prize (Top 5% of 42992 teams) in China Undergraduate Mathematical Contest in Modeling

Harvard University

Boston, USA

Summer School Student

July 2018—Aug. 2018

• Course: "Developing Cross-Platform Mobile Apps With Xamarin" (36 academic hours)

GPA: 4.00/4.00

PUBLICATIONS

Guoqing Luo, Jiaxin Pan, Min Peng, "RDSGAN: Rank-based Distant Supervision Relation Extraction with Generative Adversarial Framework" [Arxiv] (submitted to NAACL 2021)

Guoshun Nan, Zhijiang Guo, **Guoqing Luo**, Wei Lu, "Learning Latent Structures for Document-Level Relation Extraction" (submitted to TKDE)

RESEARCH EXPERIENCE

StatNLP, Singapore, Singapore University of Technology and Design

Oct. 2020—Present

Interpretability of Attention Mechanism in Transformers (in progress)

Advisor: Associate Professor Wei LU

- Used BiLSTM+Attention to classify SST-2 dataset, calculated and visualized polarity score and attention score.
- Removed positional embedding from the transformer and visualized the attention score after the removal.

StatNLP, Singapore, Singapore University of Technology and Design

Jun. 2020—Present

Dynamic Latent Structures for Real-Time Dialogue-Based Relation Extraction (in progress)

Advisor: Associate Professor Wei LU

- Extracted dynamic latent structure based on Hard Kumaraswamy Distribution; Employed a relaxed form of L0 regularization to promote latent beliefs; Applied EvolveGCN to capture the dynamism of a graph sequence.
- Pre-processed dialogues such as TV Series dialogues into windows of turns to deal with temporal drift.

WHU NLP Lab, Wuhan University

Dec. 2019—Jun. 2020

RDSGAN: Rank-based Distant Supervision Relation Extraction with Generative Adversarial Framework Advisor: Professor Min PENG

- Proposed a novel generative neural framework which 1) learns the distribution of true positive instances and 2) automatically generates valid instances to provide a clean dataset for distant supervision relation extraction.
- Trained the discriminator to learn the distribution of true positive instances, excluding false positive instances via adversarial training, then the generator was trained to generate instances more similar to real ones.
- Ranked all the instances in a sentence bag; Selected instances conforming to the distribution of true positive instances via rank-based distant supervision addressing the false positive problem.

School of Computer Science, Wuhan University

Feb. 2018—Feb. 2019

Project: Human Traffic Monitoring Based on Deep Learning and Video Analysis (Team Leader)

Funded by University Students' Innovation and Entrepreneurship Contest Program

Advisor: Associate Professor Oin ZOU

- Collected numerical sample data and used TensorFlow API to construct a CNN deep learning model.
- Input collected samples into CNN for feature extraction; After pooling procedures, input features extracted by convolutional layer into RNN; Output the results of classifier, trained and improved the model with big data.

PROGRAM EXPERIENCE

Shenzhen Sunline Tech Co., LTD Internship Intern Software Engineer Shenzhen, China

Jul. 2019—Aug. 2019

- Learn knowledge about knowledge graph, data visualization, Louvain Algorithm and web crawler.
- Use Python to crawl data of a big community and the relationships between each two people, organize all the data into a form of undirected graph using Louvain Algorithm.
- Use Networkx Python and neo4j to visualize relationships among bank staff, use PageRank Algorithm to find and output the data of the most important persons in the big community.

International Volunteer Program, Nil Manel Foundation Volunteer Team Leader

Balapitiya, Sri Lanka Feb. 2019—Feb. 2019

- Learnt Relevant Course: Psychology and Economics, Understanding of modern marketing communications, Introduction to EU Law and Brexit, Understanding of Creativity, etc
- Gave final group presentation "Introduction to Reincarnation" and rank 2nd of all 8 teams.

Cambridge University Winter Development Program

Cambridge, UK

Student Leader

Jan. 2018—Feb. 2018

- Learnt Relevant Course: Psychology and Economics, Understanding of modern marketing communications, Introduction to EU Law and Brexit, Understanding of Creativity, etc
- Gave final group presentation "Introduction to Reincarnation" and rank 2nd of all 8 teams.

AWARDS & SCHOLARSHIPS

Excellent Student Scholarship (Rank: 30/367), Wuhan University	10/2020
S. I. Komarova Scholarship for academic excellence, Valeon Scholarship program	07/2020
Honorable Mention, ICM of Consortium for Mathematics and Its Applications	04/2020
First Prize (Top 3%), Translation & Interpreting Contest of Hubei Province	04/2020
National Second Prize (Top 5% of 42992 teams), China Undergraduate Mathematical Contest in Modeling	11/2019
Excellent Student Scholarship (Rank: 18/367), Wuhan University	10/2019
Excellent Student Scholarship (Rank: 25/367), Wuhan University	09/2018

PROFICIENCY

Language: Mandarin, English

Programming: Python, C++, C, C#, MATLAB, Lingo English Level: TOEFL: 103 (Speaking 25) GRE: 321+3.5

Deep Learning Framework: Pytorch / Keras