## **Guoqing LUO**

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

#### **EDUCATION**

Wuhan University 09/2017—now

Bachelor of Engineering, Computer Science and Technology, School of Computer Science Expected 2021

English Level: CET-4: 632 TOEFL:103 GRE:325+3.5

General GPA: Grade: Senior

#### **PREPRINTS**

**Guoqing Luo**, Jiaxin Pan, Min Peng, "RDSGAN: Rank-based Distant Supervision Relation Extraction with Generative Adversarial Framework" [Arxiv]

#### RESEARCH EXPERIENCE

#### School of Computer Science, Wuhan University

02/2018---02/2019

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

- Collect numerical sample data and use TensorFlow API to construct a CNN deep learning model.
- Input collected sample data into CNN for feature extraction, and after pooling procedure, input features extracted by
  convolutional layer into RNN and output the results of classifier, train and improve the model with big data.

#### WHU NLP Lab, Wuhan University

12/2019---06/2020

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

- Advisor: Professor Min PENG
   A novel generative neural framework which learns the distribution of true positive instances and automatically
- generates massive valid instances to provide a clean dataset for distant supervision relation extraction.
  Firstly, we train the discriminator to learn the distribution of true positive instances excluding false positive instances via adversarial training, then the generator is trained to generate instances more similar to real ones.
- Secondly, we rank all the instances in a sentence bag and select instances conforming to the distribution of true positive instances via rank-based distant supervision, which addresses the false positive problem.

#### StatNLP, Singapore, Singapore University of Technology and Design

06/2020---10/2020

#### Dynamic Latent Structures for Real-Time Dialogue-Based Relation Extraction (ongoing)

Advisor: Associate Professor Wei LU

- Extract dynamic latent structure based on Hard Kumaraswamy Distribution, employ a relaxed form of *L*<sub>0</sub> regularization to promote compact latent beliefs.
- Collect numerous datasets of dialogues like doctor-patient dialogues, TV series dialogues, process data into the form of short conversations to deal with temporal drift.

#### PROGRAM EXPERIENCE

## **Harvard University Summer School Program**

Boston, America

Summer School Student

07/2018---08/2018

- Learn "Developing Cross-Platform Mobile Apps With Xamarin" for 36 units.
- Successfully complete individual programming project using both C# and Xamarin to create an app for the usage of local transportation, give the final presentation of my work and get an A.

#### Shenzhen Sunline Tech Co., LTD Internship

Shenzhen, China

Intern Software Engineer

07/2018---08/2018

- 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.

## **AWARDS & SCHOLARSHIPS**

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

Deep Learning Framework: Pytorch / Keras

Programming: Python, C++, C, C#, MATLAB, Lingo