# **ZeBin Ren**

Address: Haidian District, Beijing, China.

**Tel:** 86-13238299956 **Email:** zebinren97@gmail.com **DOB:** 11/14/1997

#### Education

Beijing Institute of Technology, School of Computer Science and Technology

Sept.2019 - Present

Master of Science in Computer Science and Technology GPA: 87.04/100

Northeastern University, School of Computer Science and Technology

Sept.2015 - June.2019

Bachelor of Science in Computer Science and Technology GPA: 85.50/100

LELTS: 7.5 (Reading: 9.0, Listening: 7.0, Writing: 7.0, Speaking: 6.0)

## Research Experience

## A Distributed Graph Computing Engine Based on Gemini

June.2020 - Feb.2021

Research Assistant at Data Science Lab, Beijing Institute of Technology

The project aimed at improving the performance based on an open source implementation of Gemini, a computation-central distributed graph computation system.

- Team leader of the project
- Proposing some improvements for the system
  - Adopting new graph cutting algorithm
  - Compressing the graph to improve memory efficiency and speed for storage-intensive algorithms
  - Using targeted send scheme instead of broadcast to reduce communication cost
- Designing and implementing a distributed kelique percolation algorithm

## **Kclique Enumeration on Temporal Graph**

Zebin Ren, Ronghua Li\*

\*Supervisor: Prof. Ronghua Li

#### Working paper

This work proposed a new definition for keliques on temporal elique and an algorithm for temporal kelique enumeration based on the definition.

- Proposing a new definition for kelique on temporal clique
- Designing an algorithm for temporal kelique enumeration

#### A Distributed Algorithm for Kclique Percolation

Zebin Ren, Ronghua Li, GuorenWang

- Pending Chinese Patent, Sept 2021
- Designing and implementing a distributed algorithm for kelique percolation

### Internship

## **Graph Database Team, Bytedance**

Dec.2020 - June.2021

Designing and implementing an auto-testing system and some daily maintenance such as data bulk load, the back-end of the graph database's website and SDK

- Designing and implementing an auto-testing system
- Adding features to the data bulk load system, and the back-end of the graph database's website
- Some daily maintenance such as the SDK

#### System Group, Microsoft Research Asia

Oct.2021 - now

Machine learning system and auto machine learning

• Designing and implementing a part of an auto-machine learning system

Sorry that I can't provide the details since it is a work in progress.