# Yue Han

26 Apartment – Tsinghua University

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#### Education

#### Tsinghua University

PhD student in Computer Science and Technology

2019-Present

#### Harbin Institute of Technology

Bachelor (expected) of Computer Science and Technology, GPA – 90.6/100

2015-2019

#### **Experience**

#### **USC Summer Research Internship** - Visiting Scholar

University of Southern California

• Researching on reasoning on knowledge graphs.

Summer 2018

#### Cambridge Summer Exchange Programme - Exchange Student

• Researched and Surveyed 60 persons about Social Inequality in Britain and make the research report.

Cambridge Aug 2017

• Achieved the scholarship for the excellent performance as "Best Individual".

#### High Level Programming Language (C) Course - Teaching Assistant

HIT

Class and Experiment Q&A .

Fall 2016/2017

#### HIT ACM Summer Training 2017 - Lecturer

HIT Summer 2017

• Lectured about search and divide and conquer algorithm.

oummer 2017

#### The $3^{rd}$ International Cultural Carnival of Harbin Institute of Technology - Volunteer

HIT

• Helped Ethiopian students organize booth activities and dance performance.

Jun 2017

### **Projects**

#### Database Query Optimization Based on Deep Reinforcement Learning - Graduation Project

HIT

- Proposed an autonomous materialized view management system, AutoView, with DRL.
- Dec 2018–Jun 2019
- Designed a sequence-to-sequence model, Encoder-Reducer, to estimate cost and benefit of using MVs to answer a query.
- Proposed a serializing and encoding method to encode query's features.
- Proposed a reinforcement model to select MVs for materialization, and integrated the vectors outputted by the Encoder-Reducer model into the model.

#### Research of Query and Analysis on Knowledge Graph

HIT

• Supported by Student Innovation Training Program of Honors School of HIT.

- Dec 2016-Mar 2018
- Proposed an efficient subgraph matching approach based on graph database for complex query on RDF data.
- Designed an efficient query graph simplifying and memory management strategy to accelerate the process of subgraph matching.
- Research Paper Answering Complex RDF Query by Subgraph Matching on a Single Machine was included by proceedings of The  $10^{th}$  Student Academic Forum of Harbin Institute of Technology and obtained the Second Prize.

#### **Intelligent Personal Assistant** - Developer

HIT

- Developed in Harbin Institute of Technology International Summer School—
  "Cutting edge of Computer Science and Technology-Sensing the world and making life intelligent project".
- Jul 2017

- Developed the mail and image searching function in the application.
- Achieved the Best Creating & Idea award.

#### Friend Reader Application - Developer

HIT

An application to grab, integrate and analyze the activities of friends on multi social platform.

Fall 2017

• The application can analyze the activeness and interests of friends. It can also build a social network and analyze the hot topics between friends.

#### **Selected Honors & Awards**

Competition.

2017: Gold Medal, The ACM-ICPC Asia Regional Contest Shenyang Site (top 10% out of 180 teams)

2017: Gold Medal, CCF Collegiate Computer Systems & Programming Contest (Rank 12 among 404 competitors)

2017: First Prize, Contemporary Undergraduate Mathematical Contest in Modeling (top 292 out of 33062 teams)

**2016**: Gold Medal, Northeast Collegiate Programming Contest (top 10%)

Scholarships & Honors.

**2019**: Best 10 Graduates of Honors School Harbin Institute of Technology (top 10 out of 142 students)

2017: China National Scholarship (highest level of scholarship set by the government of China)

2017: Provincial-Level Merit Student in Heilongjiang province (top 3 out of 414 students)

**2016**: CASC Scholarship (top 10 out of 714 students)

2016: First-class People's Scholarship (top 5% out of HIT students)

## **Technical Skills**

Languages: C/C++, Python, Java, MATLAB, LATEX, Pascal, BASIC

Experiences: Linux, Git, Hadoop, Spark, PyTorch