# YIHENG SHU (舒意恒)

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## **EDUCATION & EXPERIENCE**

Master of Computer Technology, Nanjing University

Nanjing, China, Sep. 2020 - Jun. 2023

Advised by Prof. Yuzhong Qu, Websoft research group

GPA: 90.96 / 100

Bachelor of Software Engineering, Northeastern University

Shenyang, China, Sep. 2016 - Jun. 2020 GPA: 4.1073 / 5.0, top 1.7%

Advised by Prof. Guibing Guo and Prof. Gang Wu.

Research Intern, Microsoft Research Asia Advised by Researcher Zhiwei Yu, Knowledge Computing group Beijing, China, Feb. 2022 - Feb. 2023

### RESEARCH INTERESTS

My research interests include question answering (QA) and knowledge graph (KG). Currently, I mainly focus on knowledge base question answering (KBQA) with semantic parsing-based methods, which converts natural language questions into structured formal queries such as SPARQL. I attempt to address challenges such as generalization and data scarcity. I have also conducted some research about recommender systems. Please see my research statement.

#### **PUBLICATIONS**

6. Question Decomposition Tree for Answering Complex Questions over Knowledge Bases

[AAAI'23] Xiang Huang, Sitao Cheng, Yiheng Shu, Yuheng Bao, Yuzhong Qu

5. TIARA: Multi-grained Retrieval for Robust Question Answering over Large Knowledge Base

[EMNLP'22] Yiheng Shu, Zhiwei Yu, Yuhan Li, Börje F. Karlsson, Tingting Ma, Yuzhong Qu, Chin-Yew Lin

4. Logical Form Generation via Multi-task Learning for Complex Question Answering over Knowledge Bases

[COLING'22] Xixin Hu, Xuan Wu, Yiheng Shu, Yuzhong Qu

3. EDG-based Question Decomposition for Complex Question Answering over Knowledge Bases

[ISWC'21] Xixin Hu, Yiheng Shu, Xiang Huang, Yuzhong Qu

2. Deep Learning for Sequential Recommendation: Algorithms, Influential Factors, and Evaluations

[TOIS'20] Hui Fang, Danning Zhang, Yiheng Shu, Guibing Guo

1. Deep Learning-based Sequential Recommender Systems: Concepts, Algorithms, and Evaluations

[ICWE'19 tutorial] Hui Fang, Danning Zhang, Guibing Guo, Yiheng Shu

#### SELECTED HONORS & AWARDS

Yingcai Scholarship, Nanjing University	2022
First-class Academic Scholarship for Master Students, Nanjing University	2020 - 2022
Provincial Excellent Graduates (top 3%), Education Department of Liaoning Province	2020
Meritorious Winner in MCM/ICM (international top 7%), COMAP	2019
Suzhou Industrial Park Scholarship(top 5%), Northeastern University (China)	2019
Pacemaker to Outstanding Student (top 1%), Northeastern University (China)	2018
National Scholarship (top 3%), Ministry of Education of the P.R. China	2018

#### TEACHING ASSISTANCE

Linux Operating System Analysis, Northeastern University, China

2017 Spring

Last modified: Nov., 2022