# XINYUE ZHANG

Southeast University, Nanjing, China (+86) 137-5390-1285 | xyzhang.gm@gmail.com | xinyuezhang.xyz

#### **EDUCATION**

Southeast University Nanjing, China

B.S. in Electronic Science and Engineering

Sept. 2017 to July 2021 (expected)

- GPA: 85/100.
- Joined the Knowledge Graph Research Group in Sept. 2019, supervised by Prof. Meng Wang.
- Relevant Courses: Linear Algebra (I got **100/100** and a **scholarship** for this course), Advanced Mathematics (90/100), Programming and Algorithm Language (C/C++) (95/100), Computer Structure and Logic Design, Probability Statistics and Stochastic Process, Computer Network, Microcomputer System and Interface, Academic Writing, etc.

#### **Imperial College London**

London, Britain

Data Science Summer School (held by Prof. Yike Guo)

July 2019 to Aug. 2019

Relevant Courses: Introduction to Artificial Intelligence, Data Science, Academic English, etc.

#### **PUBLICATIONS**

- Xinyue Zhang, Meng Wang, Muhammad Saleem, Axel-Cyrille Ngonga Ngomo, Guilin Qi, and Haofen Wang. Revealing Secrets in SPARQL Session Level. *International Semantic Web Conference (ISWC)* 2020. [PDF]
- Xinyue Zhang, Meng Wang, Bingchen Zhao, Ruyang Liu, Jingyuan Zhang, Han Yang. Characterizing Robotic and Organic Query in SPARQL Search Sessions. Asia Pacific Web and Web-Age Information Management Joint International Conference on Web and Big Data (APWeb-WAIM) 2020. [PDF]

#### RESEARCH EXPERIENCE

#### Studying user search behaviors in SPARQL session level

Nanjing, China

Supervised by Prof. Meng Wang

Jan. 2020 to May 2020

- In the queries issued to SPARQL endpoints, a significant portion of the queries are robotic queries that are generated by automated scripts, which would affect the analysis of real user behaviors. Therefore, we designed an algorithm to identify robotic queries and proposed a pipeline method to distinguish between robotic queries and organic queries. The paper describing this method has been accepted in **APWeb-WAIM 2020**.
- To improve users' experience when using SPARQL, we studied user behaviors at the SPARQL session level, described
  as a continuous query reformulation process in which they try to express their needs more clearly. We had 4 key
  findings and utilized them in an application example to illustrate the potentiality of utilizing user behaviors in search
  sessions in designing technologies that help users to search via SPARQL. The paper has been accepted in ISWC 2020.

#### Sci-Magi Search Engine

Nanjing, China

Supervised by Prof. Meng Wang

Nov. 2019 to - (ongoing)

- The goal is to build an academic search engine that has the power of <u>Magi</u>, which is a search engine that can summarize knowledge from natural language texts and also visualize relations between them.
- Our team is responsible for building an ontology for all the academic fields, like <u>computer science ontology (CSO)</u>. My
  job is to collect and pre-process academic data, as well as mining basic relations between academic fields.

## **PROJECTS**

#### **Real-time Style Transfer Glasses**

Nanjing, China

Supervised by Prof. Jun Wu (Chinese website) in this lab

Oct. 2018 to Aug. 2020

- It's a **Student Research Training Program (SRTP)** Project at **National Level**, in which I served as a **team leader**.
- Employed a device that can transfer the style of scenes in front of you in real-time and display results on glasses.
- Obtained a Chinese **Utility Model Patent** of head-mounted style transfer device (2019211895013).
- Our implementation of the interactive platform of real-time style transfer based on PC: [code].

# **CONFERENCE PRESENTATIONS**

APWeb-WAIM 2020 Virtual

Presented our paper in Research Session: Data Mining.

Sept. 2020

• Joined the session and presented our paper: Characterizing Robotic and Organic Query in SPARQL Search Sessions, by recording videos in advance and doing Q&A online. [PPT]

### **RESEARCH INTERESTS**

My research interests include but not limited to: Knowledge Graphs, Semantic Search, Information retrieval, User search behaviors, and Graph data analysis.