

CHEN ZIXUAN

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EDUCATION

Fudan University

Master of Engineering in Software Engineering

09/2017-present

GPA: 3.56/4.0, **Rank:** 8/90

2nd Prize Scholarship of Academic Excellence

10/2018&10/2019

Postgraduate Academic Scholarship

06/2018&06/2019

Beijing Jiaotong University

09/2013-06/2017

Bachelor of Engineering in Software Engineering

GPA: 89/100, **Rank:** 14/140

2nd Prize Scholarship

09/2015

3rd Prize Scholarship

09/2014&09/2016

École d'Ingénieurs en Informatique, France

01/2016-06/2016

Computer Science Related Courses: Chess Project 14/20, IT Overview 15/20, Operating Systems-Unix 19/20, Sustainable Development and Green IT 16/20

RESEARCHES & PROJECTS

Work Pertinent to SimRank

07/2019-present

Advisor: Prof. Weiguo Zheng

- Learned about SimRank related algorithms including dynamic SimRank and weighted SimRank;
- Designed a SimRank algorithm on Knowledge Graph.

Intelligent Interactive Guide Project (National Key R & D Project)

05/2018-present

Conducted in Fudan-DASLAB, Advisor: Prof. Xiaoyang Sean Wang/Prof. Yinan Jing

- Cooperated with Alibaba and some universities including Renmin University of China;
- Provided the big data analysis recommendations for firms, and recommendation analysis operations/methods to firm users during interactions;
- Worked as the Project Manager for a while and performed well;
- Details:
 - Designed and realized the analysis method recommendations which can be considered to be a model selection problem, and proposed a model selection approach, which performs well in our experiments on real-world data;
 - The project database management included HDFS/MySQL/Hive and data preprocessing;
 - Constructed the framework for the project front-end development.

Work Relevant to the Graph Database

01/2018-present

Conducted in Fudan-DASLAB, Advisor: Prof. Xiaoyang Sean Wang/Prof. Zhenying He

- Developed a novel index, namely RC-Index and corresponding filter algorithm RC-Filtering to filter join tuples and thus increase join efficiency in SPARQL queries;
- Designed and realized a graph decomposition algorithm, to decompose the large-scale knowledge graph into a tree structure and conducted the range encoding for the tree structure to construct RC-Index;
- Carried out experiments in large-scale databases like Yago/Lubm, showing that our algorithm outperforms the state-of-art methods in terms of both query efficiency and memory cost;
- Independently did the branch work: built templates based on the vertex types in the graph to filter the intermediate results, which enhanced the query efficiency.

Work Pertinent to Text-to-sql

03/2019-08/2019

Conducted in Fudan-DASLAB, Advisor: Prof. Xiaoyang Sean Wang/Prof. Yinan Jing

- Studied how to transfer natural language to the sql statements;
- Engaged in the design of relevant algorithms for the model;
- Learned the work relevant to the Graph Neural Network and Graph Embedding, and tried to run and modify the open source code of diverse models.

Design and Realization of the Intelligent Recommendation System Based on the SimRank Algorithm

10/2016-06/2017

Conducted in Beijing Jiaotong University, Advisor: Prof. Fengjuan Feng

- Applied the SimRank-based similarity algorithm and recommendation algorithm of collaborative filtering, to realize a movie recommendation system in MovieLens data.

INTERNSHIPS

Corporate Technology, Siemens Ltd. China

11/2016-06/2017

Intern

- Participated in a project named “Virtual Intelligent Field Service Assistance”, to provide trouble shooting advice for the engineers in workshops;
- Details:
 - Conducted the app development with the Ionic framework;
 - Learned the SimRank algorithm and realized it in Java;
 - Constructed the project test architecture and wrote the testing code.

Bisai 36 Technology Development Co., Ltd.

11/2016-06/2017

Front-end Development Intern

- Got involved in constructing the development architecture of a website for the services of sports and e-sports games such as scoring, elimination games and prizes;
- Used the AngularJS framework for the front-end webpage development.

PUBLICATION

- Zhenying He, **Zixuan Chen**, Yinan Jing, Weiguo Zheng, X.Seen Wang, Efficient SPARQL Query Processing with One-Hop-Path Filtering, submitted to ICDE.

EXTRACURRICULAR ACTIVITIES

Beijing Jiaotong University Encyclopedia Competition, Champion

05/2015

National English Competition for College Students, 2nd Prize in Beijing

06/2014

School of Software Engineering Publicity Department of Youth League Committee, Minister of News and Survey Center

09/2013-06/2015

Beijing Jiaotong University Green Home Society, Vice Minister of Recycling Department

09/2013-06/2017

OTHER INFORMATION

TOEFL ibt 107 (R 28, L 29, S 23, W 27)

07/2019

Teaching Assistant of course *Network Programming*

09/2018-01/2019

Proficient: C++/C (50000+ lines), Javascript/Html/CSS (20000+ lines), latex, linux;

Intermediate: python (10000+ lines), SQL/SPARQL;

Basic: Java, MySQL/Oracle/Mongo DB/Hive/HDFS.