Hao Wang

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EDUCATION

Xi'an JiaoTong University (XJTU) *Sep. 2018 – Jun. 2022*

- Bachelor of Engineering in Software Engineering
- Overall GPA: 3.75; Major GPA: 3.9; Ranking: 3/85
- **Scholarships:** Second-class scholarship of XJTU (2020;10%); Third-class scholarship of XJTU (2019;25%);
- **Select major courses:** *Database Systems (91/100), Linear Algebra and Analytic Geometry (98/100), Probability Theory and Mathematical Statistics (93/100), Discrete Mathematics Fundamentals (92/100), Computer Graphics (96/100), Principles of Compilers (90/100), Data Structure and Algorithm (91/100)*

RESEARCH INTERESTS

Database Systems

WORK EXPERIENCES

Full-Time Employee in Microsoft MSAI *May. 2022 – Present*

- Work on Speller related work
- Refactor the search query diagnostics replay pipeline to improve query replay success rate.
- Build substrate search (including Bing search) diagnostics data storage for worldwide users.
- Help other teams onboarding services on TenantFeedback

Microsoft China MSAI Speller team *Jul. 2021*

Position: Machine Learning Engineer Intern,

- Optimized STM language model by modifying Kneser-Ney Smoothing and reduced model size by about 30% while keeping performance flat.
- Fix CJK language offset and length error by using SCOPE to extract feature of user query
- Optimized cosmos execution code

Huawei Cloud&AI BG Opengauss Database team *Feb. 2021*

Position: Database Kernel Developer Intern, guided by Xiongjia Zhou

- Participated in the optimization of the SQL engine layer of the execution plan of Rownum in Huawei's self-developed database opengauss.
- Optimize usage scenarios (about 20 types) to improve database performance.
- Fix the bug of incorrect rownum in partition table.

RESEARCH EXPERIENCES

Research on SpeechChain Development at NAIST *Mar.2022 – Jul.2022*

Position: Research Assistant Supervisor: Prof. Satoshi Nakamura

- Build a SpeechChain Toolkit, that is designed for simplifying the pipeline of the research on the machine speech chain.
- Implement Speech Recognition, Speech Synthesis, Speaker Recognition Models.
- Implement GPU-aid batch-level pseudo data generation and Off-the-shelf correction functions for pseudo labels including language model joint decoding, ypothesis length adjustment, Decoding confidence filtering, silence removal, etc.

Research on Software Analytics at York University-Toronto *Jun.2021-Sept.2021*

Globalink Research Internship sponsored by Mitacs

- Conduct study and research on program slicing and participate in the development of C++ static program analysis tools.
- Apply program slicing in the four processes of compilation, analysis, optimization, and verification.

SKILLS

Program Language: C/C++, JAVA, Python, C#