# Jiahao Fang

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### **OBJECTIVE**

To apply for the master program in Computer Science or Electrical and Computer Engineering starting from Fall 2024.

# **EDUCATION**

#### University of Illinois Urbana-Champaign

Illinois, USA

Major in Electrical Engineering, Minor in Computer Science, GPA 3.89/4.00

August 2020 - May 2024 (Expected)

• CS 411 Database Systems (A)

• CS 498 Cloud Computing Applications (A)

• ECE 397 Individual Study in ECE (A)

Major in Electrical Engineering and Automation,

• ECE 329 Fields and Waves I (A+)

• ECE 342 Electronic Circuits (A)

**Zhejiang University** 

Zhejiang, China

September 2020 - June 2024 (Expected)

GPA 3.90/4.00

# RESEARCH EXPERIENCE

#### The Application of Machine Learning to Datebase Query

May 2023 - Present

Undergraduate Research Assistant in Computer Science Department Supervised by **Professor Daniel Kang** Contribution to Conference Publication, University of Illinois Urbana-Champaign

- Implemented and reproduced functioning code of specify approximate selection with guarantees (SUPG) to prepare for Approximate Selection with Guarantees using Proxies in GitHub
- Generated experiment datasets, modify codes, and did experiments about query optimization for Applied AI for Database Systems and Applications (AIDB)

## Self-study for Machine Learning and Computational Imaging

January - May 2023

ECE 397, Individual Study in ECE Problems

Supervised by Professor Jane Zhao

Independent Study Course about image processing, University of Illinois Urbana-Champaign

- Developed object detection Machine Learning models in different types of unstructured datasets, such as images, audios, and videos
- Summaried advantages of vaious Machine Learning algorithms based on math proof in Course Report

### CONFERENCE PUBLICATION

Akash Mittal, Chenghao Mo, **Jiahao Fang**, Chengsong Zhang, Tengjun Jin, Timothy Dai, **Daniel Kang\***. AIDB: a Sparsely Materialized Database for Queries using Machine Learning. submitted to ACM SIGMOD/PODS International Conference on Management of Data, Santiago, Chile, June 9-15, 2024.

## COURSE PROJECT

CS 411 Database Course Project, University of Illinois Urbana-Champaign

Fall 2022

- Established a complete website on PC or a local network from the front end through back to the server and the database with *project sample link*
- Achieved login, search, and post functions on our website

# HONORS AND AWARDS

The Third Prize of Zhejiang University Academic Excellence

September 2020 - June 2021

Meritorious Winner (Top 7 percent)

January 2021

The Mathematical Contest in Modeling in Problem B (discrete problem)

## COMPUTER SKILLS

Basic Languages: Python, C++

Database: MySQL, MongoDB, Neo4j (SQL and NoSQL)
Web Design: Nodejs, Postman, React (JavaScript library)