

## Jiahao Fang

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### OBJECTIVE

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

### EDUCATION

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#### University of Illinois Urbana-Champaign

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

Illinois, USA

May 2022 - May 2023

- CS 411 Database Systems (A)
- CS 498 Cloud Computing Applications (A)
- ECE 397 Individual Study in ECE (A)
- ECE 329 Fields and Waves I (A+)
- ECE 342 Electronic Circuits (A)

#### Zhejiang University

Major in *Electrical Engineering and Automation*,  
GPA 3.90/4.00

Zhejiang, China

September 2020 - June 2024 (Expected)

### RESEARCH EXPERIENCE

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

*Undergraduate Research Assistant in Computer Science Department*

June 2023 - Present

Supervised by **Professor Daniel Kang**

Contribution to Conference Publication in The Data and Information Systems Laboratory (DAIS), 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

*ECE 397, Individual Study in ECE Problems*

January - May 2023

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 various Machine Learning algorithms based on math proof in *Course Report*

### CONFERENCE PUBLICATION

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Akash Mittal, Chenghao Mo, **Jiahao Fang**, Chongsong Zhang, Tengjun Jin, **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

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*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

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**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

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**Basic Languages:** Python, C++  
**Database:** MySQL, MongoDB, Neo4j (SQL and NoSQL)  
**Web Design:** Nodejs, Postman, React (JavaScript library)