

# MINGCHAO ZHANG

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🌐 [github.com/mingchao-zhang](https://github.com/mingchao-zhang) 🔗 [mingchao-zhang.github.io](https://mingchao-zhang.github.io) in [www.linkedin.com/in/mingchaoz](https://www.linkedin.com/in/mingchaoz)

## EDUCATION

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**University of Illinois at Urbana-Champaign**  
*B.S. in Mathematics and Computer Science*

May 2020 (Expected)  
GPA: 3.88

## EXPERIENCE

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### Cohesity

*Software Engineering Intern*

June 2019 - August 2019

*San Jose, CA*

- Developed a tool in Python that measures how well indices perform, which are generated by different document summarization techniques
- Implemented a Java plugin for Elasticsearch to enable customized document ranking given a customized document mapping
- Integrated the indexing schema into a production app which reduces index storage size by 45% on test data sets

### UIUC Math and CS Departments

*Undergraduate Teaching Assistant for Discrete Math*

January - December 2018

*Urbana, IL*

- Co-teach 60-minute discussion sections weekly for 20 students
- Host office hours and lead exam review sessions

## PROJECTS

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### Hourglass

*Chrome Extension, React, IndexedDB*

- Develop a chrome extension that tracks users' browsing activities and patterns
- Implement functions in React to read and render data from IndexedDB
- Design and build advanced functionalities such as website blacklists

### Show me the Carb Fax

*jQuery, PHP, SQL*

- Create a web application that suggests and displays food items in real-time, using jQuery and PHP
- Implement advanced database functionalities in SQL such as automatic deletions of certain food items

### Scheme Interpreter

*Python, Scheme*

- Understand how functional programming languages like Scheme work in terms of calling conventions and stack frames in recursive calls
- Implement a Scheme interpreter in Python with advanced features such as, Lambda Procedure, Mu Procedure, and Macro Procedure
- Able to use the interpreter to write real-world applications such as RSA encryption

## SKILLS & RELEVANT COURSEWORK

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### Skills - Proficient

Python, C/C++

### Skills - Familiar

HTML/CSS/Javascript/React, Java, Go, SQL  
Scheme, Unix, Git, Docker, Elasticsearch

### Relevant Coursework

Data Structures, Algorithms, Operating Systems, Databases  
Web Programming, Machine Learning, Computer Architecture