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# Kevin Cao



<https://defcoding.github.io>



[/in/cao-kevin](https://github.com/cao-kevin)

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## EDUCATION

### University of Chicago

Start Date: Sep 2021

Master's in Computer Science

Chicago, IL

Specialization: Software Engineering

### Indiana University

Graduation Date: May 2021

B.S in Computer Science | Minor in Mathematics

Bloomington, IN

Specialization: Software Engineering

Major GPA: 3.967 (Cumulative GPA: 3.384) / 4.00

## TECHNICAL SKILLS

Languages	Java, Python, Javascript, C, HTML, CSS, C#, x86, L <sup>A</sup> T <sub>E</sub> X
Frameworks	ReactJS, Bootstrap, jQuery
Databases	PostgreSQL
Other	Unix, Git, IntelliJ, XCode, RESTful APIs, Agile Development, Vim, Photoshop, After Effects, Premiere Pro

## WORK EXPERIENCE

### Indiana University Department of Computer Science

May 2019 - Present

*Data Structures Head Undergraduate Instructor*

Bloomington, IN

- Boost grading efficiency by 99% by building various scripts to automate grading processes for 130 students.
- Lead other instructors as the head assistant and facilitate communication and teamwork.
- Instruct laboratory classes to personally guide students and grant hands-on experience with building data structures.
- Hold office hours to answer questions and provide supplementary lectures to topics discussed in class.

### Indiana University School of Informatics, Computing, and Engineering

August 2019 - May 2020

*CS Tutor*

Bloomington, IN

- Managed and guided groups of students requesting tutoring for different courses.
- Provided assistance to students for a variety of topics, including C, artificial intelligence, and databases.
- Arranged private tutoring sessions for students with special needs.

## RESEARCH EXPERIENCE

### Research Assistant

August 2020 - December 2020

- Designed a program to perform computations of molecular dynamics through the interpretation of chemical assemblies as chemical abstract machines.
- Implemented the chemical abstract machine and performed asynchronous computation by using Scala's Chymyst library.

## TECHNOLOGY PROJECTS

### Tokyo Grill Inc. Website

January 2021

- Cut website costs by over 90% for Tokyo Grill as the sole developer of the website.
- Developed and deployed static site with the Sanity.io CMS and ReactJS/MDBootstrap frameworks.

### NEAT Dino Run

April 2020

- Built Google's Dino Run game in Processing 3 and developed an AI using NEAT algorithm that could "beat" the game.
- Implemented real-time graphical interfaces to display neural networks and show progress of generational performance.

### Teaching Assistant Discord Bot

March 2020

- Created a bot that interacted with the Discord API to assist instructors in teaching online courses and remote learning.
- Organized a queue of students while maintaining an interactive topic subscription list using the bot.

### DefineCoding Website

July 2018 - Present

- Designed mobile-friendly static personal website from scratch with vanilla HTML/CSS/Javascript.
- Write informational blog posts and YouTube videos on various programming concepts to educate viewers.