

# Kevin Cao



<https://defcoding.github.io>



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

## EDUCATION

### University of Chicago

M.S in Computer Science

Cumulative GPA: 4.00 / 4.00

Graduation Date: June 2022

Chicago, IL

### Indiana University

B.S in Computer Science | Minor in Mathematics

Specialization: Software Engineering

Major GPA: 3.971 (Cumulative GPA: 3.416) / 4.00

Graduation Date: May 2021

Bloomington, IN

## TECHNICAL SKILLS

Languages	Python, Javascript, Java, C/C++, HTML, CSS, C#, Haskell, x86
Frameworks	ReactJS, Ant Design, Bootstrap, jQuery
Databases	PostgreSQL
Other	Unix, Git, Docker, IntelliJ, XCode, RESTful APIs, Agile Development

## WORK EXPERIENCE

### Certik LLC

Software Engineer Intern

May 2021 - Present

New York, NY

- Develop in-house tools and website using React, HTML, and CSS to expedite the auditing process for the engineering team.
- Employ AWS utilities such as DynamoDB, Lambda, and SQS to handle server backend and automation.
- Communicate closely with end-users to implement desired features and fix bugs in a timely manner.
- Work with senior auditors to analyze client Solidity smart contracts and report on security vulnerabilities, correctness, and optimizations.
- Research and utilize useful external SAAS and APIs to be integrated into auditing tools.
- Nominated for the monthly Founder's award in the first month of the internship.

### Indiana University Department of Computer Science

Data Structures Head Undergraduate Instructor

May 2019 - May 2021

Bloomington, IN

- Received the UI of the Year award in Spring 2021 after receiving more than 80% of the nominations from the CS department.
- Boosted grading efficiency by 99% by building various scripts to automate grading processes for over 100 students.
- Led other instructors as the head assistant and facilitated communication and teamwork.
- Instructed laboratory classes to personally guide students and grant hands-on experience with building data structures.
- Held office hours to answer questions and provided supplementary lectures to topics discussed in class.
- Published multiple Youtube videos and blog posts going in-depth over topics covered in the course.

## RESEARCH EXPERIENCE

### Research Assistant

Aug 2020 - Dec 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

### S.P.I.D.E.R. (Stocks Program Investing Dogecoin when Elon Retweets)

Mar 2021

- Designed a script utilizing the Twitter API to fetch Elon Musk's tweets and invest in Dogecoin using the Robinhood API whenever a tweet about cryptocurrency or doge is made.
- Augmented script with a notification service using the Pushbullet API notify user through their mobile device when a relevant tweet was detected.

### Tokyo Grill Inc. Website

Jan 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.

### Teaching Assistant Discord Bot

Mar 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.