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# Kevin Cao

<https://defcoding.github.io>

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## Education

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### Indiana University

2016 - Present

**B.S in Computer Science | Minor in Mathematics**

Expected Graduation Date: May 2021

**Specialization:** Software Engineering

**Major GPA:** 3.961 (Cumulative GPA: 3.333)

## Technical Skills

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<b>Front-End</b>	HTML, CSS, Javascript, ReactJS
<b>Back-End</b>	Java, C, Python, Racket, C#, ExpressJS, GDScript, Swift, Kotlin, Scala
<b>Databases</b>	PostgreSQL
<b>Workflow</b>	Unix Operating Systems (Arch/Ubuntu), Git.
<b>Other</b>	L <sup>A</sup> T <sub>E</sub> X, Markdown, Photoshop, Premiere, After Effects, Animate, Audacity, AutoDesk Inventor, Godot, Unity

## Work Experience

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### Indiana University Department of Computer Science

May 2019 - Present

*Data Structures Undergraduate Instructor*

Bloomington, IN

- Lead laboratory classes to personally guide students and grant hands-on experience with building data structures.
- Approach data structures in a variety of perspectives to provide flexible teaching material to students.

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

August 2019 - May 2020

*Tutor*

Bloomington, IN

- Successfully managed and guided groups of students requesting tutoring for different courses.
- Aided Chinese foreign exchange students by teaching in Mandarin Chinese.

## Leadership Experience

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### Indiana University Student Government

Aug 2020 - Present

*Project Manager*

Bloomington, IN

- Manage a group of software engineers in rebuilding the IU Student Government website.
- Utilize Ktor/Kotlin to create HTML and CSS templates.

## Research Experience

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### Research Assistant

Aug 2020 - Present

- Perform computations of molecular dynamics through the interpretation of chemical assemblies as chemical abstract machines.
- Utilize Scala's Chymyst library to implement the chemical abstract machine and perform asynchronous computation.

## Technology Projects

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### NEAT Dino Run

April 2020

- Recreated Google Chrome'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

- Utilized Discord API to create a bot to assist instructors in teaching online classes during COVID-19 pandemic.
- Bot would organize and manage a queue of students, and also maintained a subscription list to teaching topics by taking advantage of Discord reactions.

### DefineCoding Website

July 2018 - Present

- Learned responsive website design practices to make the website mobile friendly.
- Educate readers with informative blog posts and YouTube videos on various programming concepts.