
Kevin Cao

<https://defcoding.github.io>

Education

Indiana University

2016 - Present

B.S in Computer Science

Expected Graduation Date: May 2021

Specialization: Software Engineering

Major GPA: 3.961 (Cumulative GPA: 3.333)

Work Experience

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.

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.

Tokyo Grill Inc.

June 2015 - Present

IT Support

Terre Haute, IN

- Consult with users and troubleshoot to ensure that all devices in the restaurant run smoothly and do not hinder operations.
- Utilize web development and graphic design software to create a user-friendly and intuitive website for the restaurant.

Technology Projects

Notable GitHub Projects

<https://www.github.com/defCoding>

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 Helper 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.

Sorting Algorithms Visualizer - Windows Application

[October 2019]

- Used Visual Studio, C#, and MVC design scheme to develop a visually appealing sorting algorithm visualizer.
- Exploited multi-threading and buffers to minimize RAM usage while maximizing program speed.

DefineCoding Website (<https://defcoding.github.io>)

[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.

Technical Skills

Programming Java, C, Python, Racket, Javascript, C#, GDScript, Swift, Kotlin

Markup L^AT_EX, Markdown, HTML, CSS

Databases PostgreSQL

Workflow Unix Operating Systems (Arch/Ubuntu), Git.

Other Photoshop, Premiere, After Effects, Animate, Audacity, AutoDesk Inventor, Godot, Unity