David Cao
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EDUCATION

Dominican University of California   May 2022
Bachelor of Science in Applied Computer Science   San Rafael, CA

TECHNICAL SKILLS

General: Python, Javascript, Java, Algorithm Design & Analysis, Docker, Linux, Vim
Backend Web: Flask, MongoDB, WebSockets, Node, Express, SQL, API development
Frontend Web: React, Redux, SASS/SCSS, NextJS, jQuery, HTML/CSS

WORK EXPERIENCE

Teaching Assistance - Dominican University of California - 01/2022 ~ Present
(Introduction to Data Structures)
- Held weekly office hours to assist students in understanding data structures concepts such as linked lists, hashmaps, and prefix trees
- Evaluated student performance on course assignments

Software Engineer Intern - Niko Korolog Music - 08/2021 ~ 11/2021
(Python, Flask, Jinja2, HTML, CSS)
- Lead a team of interns in frontend development on internal data management tool using Jinja2 template engine
- Worked with backend team to develop APIs on Flask server and implemented the API's on the client side
- Planned development with scrum sprints and managed development code base with Git branches

ENGINEERING PROJECTS

PopularTickers.com - https://populartickers.com
(Flask, MongoDB, React, SASS, WebSockets, Docker, TextBlob)
- Built a full-stack web application monitoring retail trading interest in the stock market based on sentiment on social media platform Reddit
- Leveraged Reddit's API to monitor and display stock and finance discussions in real-time via WebSockets
- Utilized natural language processing library TextBlob to parse Reddit contents for data such as sentiment and popularity of stock tickers
- Implemented caching on routes to handle heavy traffic scenarios
- Dockerized and hosted Flask backend server and database on a virtual machine

FastKeys.io - https://fastkeys.io
(React, Redux, SASS, ImmerJS, Flask, MongoDB, Docker)
- Designed and built a full-stack type-racing web game allowing players to challenge other players on typing speed and accuracy
  Challenge Demo: https://fastkeys.io/game/b704bd02
- Architected component and state based frontend interface using React JS and Redux
- Developed and deployed backend server with a MongoDB database to store player generated games

5moves.xyz - https://5moves.xyz
(React, SASS, Flask, MongoDB)
- Designed a Tic Tac Toe style game with alternative rules where players pre-select 5 moves in advance and create a sharable link to challenge others
  Challenge Demo: https://5moves.xyz/game/01da092a
- Utilized SASS/CSS to animate various events of the game
- Deployed Flask server with MongoDB database to store generated games

Slash To Search - https://davidcao.sh/slash-to-search/
(Javascript, CSS, HTML)
- Published a Chrome browser extension enabling users to press the "/" key on any site to focus on the search bar