# Jasmine Tai

Fremont, CA | (510) 449-9468 | jasminecktai@gmail.com
github.com/jasminetai | linkedin.com/in/jasmine-tai-1b196421a

## EDUCATION

**University of California, Santa Cruz** — *B.S. in Computer Science and Applied Mathematics*
September 2021 - present | Expected December 2024
**GPA:** 4.00
**Relevant Coursework:** Data Structures and Algorithms, Computer Architecture, C Programming, Calculus 1-3, Linear Algebra, Discrete Math, Engineering Principles of Electronics
**Current Coursework:** Principles of Computer Systems, Probability and Statistics, Ordinary Differential Equations

## WORK EXPERIENCE

**Web Developer Intern** — *Tech4Good Lab*
September 2022 - present | Angular, HTML, SCSS, TypeScript
- Working in a team responsible for developing the frontend and backend of Annota, a web application that supports collaborative learning in qualitative analysis
- Building responsive and user-friendly web components from Figma prototypes with HTML, SCSS, and TypeScript
- Implementing functionality for interactions with a Firestore backend database using RxJS and NgRx

**Undergraduate Research Assistant** — *University of California, Santa Cruz*
December 2021 - present | Python, PyTorch, Rasterio
- Applying machine learning and parallel processing concepts to the study of bird habitat connectivity
- Collaborating alongside professors to efficiently simulate and predict bird species movement on a national scale
- Processing large amounts of geospatial data at fine resolutions with Rasterio to analyze bird repopulation and identify key bird conservation land patches
- Incorporating a pipeline that utilizes the IUCN Red List and eBird APIs to help automate the production of model inputs

## PROJECTS

**Game Integration Discord Bot**
March 2022 - July 2022 | JavaScript, Node.js, PostgreSQL
- Deployed a bot on the popular social platform Discord that fetches player data from a browser game and responds to users via the Discord API, featuring 20+ supported commands that simplify and enhance players' experiences
- Configured bot to optionally store player statistics over time for later viewing in a PostgreSQL database
- Introduced the ability to produce sleek graph visualizations of temporal data with the Chart.js library
- Regularly maintained and used in multiple servers, with 100+ player accounts opted into the statistics-tracking service

**HTTP Server**
January 2023 - February 2023 | C
- Developed a simple implementation of a HTTP 1.1 server that processes GET and PUT client requests in C
- Practiced design principles like modularity and abstraction to create a successful server design

**Terminal Wordle Game & Solver**
May 2022 | C
- Built a version of the online game Wordle in the terminal with C
- Added a hard mode that ensures new guesses do not conflict with information from previous guesses
- Created a Wordle solver that smartly solves randomly generated Wordle puzzles, averaging 3.68 guesses per word given the official game's list of words to pick solutions and guesses from

**Course Planner Website**
January 2022 | HTML, CSS, JavaScript
- Designed a 4-year class schedule planner website for students at the University of California, Santa Cruz with a partner
- Leveraged Cheerio and Axios libraries to scrape 5900+ course and major/minor data points from the online catalog

## TECHNICAL SKILLS

**Programming:** JavaScript (ES6), Python, C, C++, Java, HTML/CSS, SQL
**Frameworks/Libraries:** Angular, Axios, Puppeteer, NumPy, Bootstrap
**Developer Tools:** Node.js, PostgreSQL, MongoDB, MATLAB, Jupyter, Linux, Visual Studio Code, Git, Github, Heroku, Figma