

Yoto Kim

408-674-7279 | yongtoyotokim@gmail.com | [linkedin.com/in/yoto-kim](https://www.linkedin.com/in/yoto-kim) | github.com/yotzkim

EDUCATION

University of California, San Diego

La Jolla, CA

Bachelor of Science in Mathematics-Computer Science, Minor in Cognitive Science

Sep 2022 – Jun 2026

GPA: 3.96/4.00 — *Provost's Honors*

Relevant Courses: *Data Structures, Algorithms, Systems Programming, Software Tools and Techniques, Computational Theory, Computer Science Research, Data Science, Discrete Math, Linear Algebra*

SKILLS

Languages: Python, Java, C, C++, JavaScript, TypeScript, HTML5, CSS, MATLAB

Libraries & Frameworks: React, Node.js, Express, Next.js, Pandas, NumPy, Tensorflow, Tkinter, JUnit

Tools: Git, GitHub, LaTeX

Databases: MongoDB

EXPERIENCE

Center for Energy Research – Software Development Intern

May 2024 – Present

Javascript, Typescript, React, React Native

La Jolla, CA

- Developing an iOS app featuring interactive data visualizations and educational models on clean energy
- Built a Bottom Sheet component that displays 5 renewable energy sources for 1 of 8 global regions when selected on a map, implementing sliders that allow users to change energy values and visualize the effects of the changes

Knight Lab – Deep Learning Researcher

Sep 2023 – Jun 2024

Python, Tensorflow, Pandas, NumPy, Matplotlib, Seaborn

La Jolla, CA

- Fine-tuned an attention-based neural network with over 7,000 gut microbiome samples to predict an individual's diet given their microbiome profile
- Achieved a **20x** lower Mean Squared Error in predicting an individual's Total Dietary Fiber intake compared to the state-of-the-art Random Forest model
- Led model training sessions, tuning hyperparameters at each session, and wrote Python scripts to visualize performance through scatterplots and PCoA plots

Juni Learning – Computer Science Instructor

May 2023 – May 2024

Python, Java

Remote

- Conducted one-on-one programming classes for 10 students ages 12-18 through Python and Java
- Taught topics ranging from syntax and object-oriented programming principles (objects, classes, methods) to sorting algorithms, data structures, and time complexity
- Refined existing curriculum with tailored custom projects and assignments, resulting in improved learning pace and student engagement

PROJECTS

Patriots and Paws | *TypeScript, MongoDB, Express.js, Node.js, React, MaterialUI, Next.js* Jan 2024 – Jun 2024

- Collaborated within a team of 7 developers to create a furniture item request interface for Patriots and Paws, a nonprofit that has helped over 14,000 families in-need receive \$11.5 million in household items
- Created a MongoDB database model for item requests and the API route for request submissions and edits using Express, applying validation rules to ensure all required fields are present and correct in the request body
- Implemented the frontend of item request forms, inventory updates, and form edits, building custom reusable React components (text field, multiple choice, drop down) and managing validation and submission with React-hook-form

Demiya Website | *JavaScript, React, Next.js, CSS, Git*

May 2023 – Aug 2023

- Built a restaurant website serving 300+ users daily from three different locations
- Leveraged Google Lighthouse to identify areas of improvement, enhancing overall website performance by 50%, accelerating speed index sixfold, and boosting search engine optimization by 15%
- Designed a responsive and easy-to-navigate user interface to fit any screen size and embedded all restaurant location frames using Google Maps API