Yoto Kim

408-674-7279 | yongtoyotokim@gmail.com | yotokim.com | 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*
Courses: *Data Structures, Algorithms, Systems Programming, Software Tools and Techniques, Computational Theory, Computer Science Research, Data Science, Discrete Math, Linear Algebra, Statistics*

EXPERIENCE

Center for Energy Research – Software Development Intern — May 2024 – Present
JavaScript, TypeScript, React Native, PostgreSQL, Express.js, Node.js, CSS, Xcode, Android Studio, GitHub — *La Jolla, CA*
- Engineered a React Native mobile app with interactive data visualizations and educational models on renewable energy, to be featured at the **2024 United Nations Climate Change Conference**
- Designed a PostgreSQL database schema to manage projected renewable energy data across **10 regions** over the next **10 years**, utilizing SQL queries to ensure efficient data processing
- Built a dynamic bottom sheet displaying **5 renewable energy sources** for each region, featuring sliders for users to adjust values and visualize the impact of their changes

IBM – Software Fellow - IBM Accelerate — Jun 2024 – Jul 2024
JavaScript, React, React Testing Library, Express.js, Node.js, CSS, GitHub — *Remote*
- Selected as **1 of 150 from over 10,000** applicants to complete weekly lectures, labs, and quizzes on full-stack development, testing, and the software development cycle under IBM engineers and experts
- Developed a React to-do web application using Material UI for styling, utilizing an Express server for backend data persistence, and implemented REST APIs for CRUD operations

Knight Lab – Machine Learning Researcher — Sep 2023 – Jun 2024
Linux, Python, TensorFlow, Pandas, NumPy, Matplotlib, Seaborn — *La Jolla, CA*
- Fine-tuned an attention-based neural network with **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** aged 12-18 in Python and Java
- Taught topics ranging from syntax and object-oriented programming principles (objects, classes, methods) to sorting algorithms, data structures, and time complexity

PROJECTS

Patriots and Paws | *TypeScript, React, Next.js, Express.js, Node.js, MongoDB, CSS, Material UI* — 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** receive **over $11.5 million** in household items
- Constructed a MongoDB model for item requests and the API route for request submissions and edits using Express, applying validation rules for all fields
- Implemented 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
- Created a restaurant website serving **300+ users** daily from **4 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%**
- Devised a responsive and easy-to-navigate user interface to fit any screen size and embedded all restaurant location frames using Google Maps API

SKILLS

Languages: Python, Java, C, C++, JavaScript, TypeScript, SQL, HTML, CSS, MATLAB
Libraries & Frameworks: React, Node.js, Express, Next.js, Pandas, NumPy, TensorFlow
Tools: Git, GitHub, GraphQL, Docker, Linux, Visual Studio Code, LaTeX
Databases: MongoDB, PostgreSQL