Matthew Cho

(669) 224-0030 | mcho9434@usc.edu | linkedin.com/in/matthew-cho-usc | matthewcho.xyz/r

Education

University of Southern California   May 2024
- Bachelor of Science, Major in Computer Science, Minor in Entrepreneurship
- GPA: 3.84 | Dean's List, Allsup Undergraduate Research Award, USC Academic Achievement Award

Skills

Languages: Java, C++, Python, C, JavaScript, HTML, CSS, Swift
Libraries & Technologies: React, PostgreSQL, Typescript, TailwindCSS, React Native, NodeJS, Firebase, Flutter, Flask

Work Experience

Beacons - Software Engineering Intern   May 2023–August 2023
- Pioneered end-to-end suspension monitoring system including Retool management dashboard and backend infrastructure scaled to store 90K+ users
- Introduced a fullstack email notification procedure with frequency control and high scalability while improving frontend design based on client feedback
- Independently proposed and implemented reusable components to improve codebase readability, developer experience, and design cohesiveness

Beacons - Software Engineering Intern   August 2022–December 2022
- Boosted weekly active VIP users by 19.7% in November 2022 through engineering new features, targeted outreach programs, and growth funnel analysis
- Collaborated with ~20 engineers to implement several large-scale software projects, including a site navigation overhaul and email marketing product kickoff

Otis Corporation - Software Engineering Intern   May 2022–July 2022
- Modernized legacy elevator touchpad utilities system by driving full migration from Java to React/PHP, reducing codebase size by 76%
- Extended server lifetime by 7 years by rewriting code to be compatible with newer Java instance
- Presented technologies for board of engineering directors to spread understanding of novel solutions

Leadership & Involvement

Code the Change - Vice President of Product & Technical Lead   August 2021–Present
- Led Agile team in developing a volunteer management system for the Ron Finley Project with React and PostgreSQL to evaluate 1000+ candidates and create new volunteering events
- Implemented inquiry management system to store 300+ annual events and maintain company profiles

Lavalab - Co-founder & Developer   September 2021–Present
- Invented Cora, an emotionally intelligent toy allowing children to control emotions through regulatory exercises
- Engineered a functional prototype with Python and Arduino Uno in a semester capable of displaying an appropriate exercise based on a user's inputted emotions

Projects

Catan Buddy
- Developed a React application to enhance and simplify gameplay by providing fair timekeeping, balanced dice rolls, data visuals, and support for 5-6 players

USC RecApp
- Launched interactive Android app via Java, XML, and Android Studio allowing users to view open gym times, cancel and make reservations, and sign up for waitlists automatically
- Wrote black-box and white-box tests with Mockito, Espresso, and JUnit for full app coverage

Center for Artificial Intelligence in Society
- Coded with Brazil-based nonprofit AIO Education to predict ENEM test results, offering targeted student lessons
- Delivered SAKT algorithm capable of modeling test results with 73.2% accuracy using real 2016-2020 exams