

Jeremy Louie

Software Engineer with a passion for developing and delivering products.
Proven ability to adapt to new environments and produce meaningful results

EXPERIENCE

Oma Robotics

San Jose, CA

Software Engineer

11/2022 - 08/2023

- Worked closely with Embryologists, Robotics Engineers, and Machine Learning Engineers to improve in-vitro fertilization (IVF) success rates using artificial intelligence and robotics
- Improved success and accuracy of robotics routines by implementing pipette calibration C++ algorithm
- Automated manual injection of spermatozoa into oocyte by developing automated C++ robotics routine
- Achieved fine-control of spermatozoa extraction by implementing C++ stepper motor API
- Designed and implemented new front-end interface to display spermatozoa healthiness and motility classifications using Qt and C++
- Developed real-time analytic monitoring platform to quickly diagnose issues from software deployed within nationwide clinics using New Relic
- Automated neural net data collection pipeline using Python and AWS S3

Juni Learning

San Francisco

Computer Science Instructor / Hiring Manager

07/2022 - 12/2022

Computer Science Instructor

09/2020 - 06/2021

- Screened candidates and conducted live-teaching interviews to assess potential instructors
- Privately tutored students in Python, Java, and C++ introductory to advanced data structure courses
- Provided daily student progress reports and learning assessment updates to parents
- Launched first-ever iOS Programming club to teach students about mobile programming

University of California, Los Angeles

Los Angeles, CA

Web Developer

11/2021 - 10/2022

- Worked closely with supervisor to promote affordable autonomous RC cars by overhauling website
- Designed and developed new Pocket Racers static website using HTML, CSS, and JavaScript
- Reduced website maintenance costs by 100% by migrating from Squarespace to GitHub Pages
- Implemented consensually tracked user data using JavaScript and Google Analytics Reporting API
- Enabled real-time Deep Reinforcement Learning by porting over Robot Operating System from Raspberry Pi to Jetson Xavier NX

CONTACT

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<https://jeremylouie.netlify.app/>

<https://github.com/jsethlui>

EDUCATION

University of California, Los Angeles
Mathematics of Computation (B.S)

SKILLS

Languages

C++, Python, Java, Bash, HTML, CSS, JavaScript, Swift, MySQL

Tools & Frameworks

Git, Qt, GDB, React, Vite, Mantine

Platforms

Linux, GitHub, Netlify, New Relic, Amazon Web Services, Google Cloud

PROJECTS

Personal Portfolio

Personal website developed to feature my professional experience, and learn more about web development. Built in React, Vite, Mantine, CSS, and deployed on Netlify

Zoomie Roomies

Dedicated web app platform that connects postgraduate students with roommates with similar interests. Frontend built in React and CSS, backend built with NodeJS, and deployed on Heroku

Runge Kutta Analysis

Research project analyzing two RK methods (written in Python) against two different ODE's. Built in Python and Jupyter Notebook