NICHOLAS OLIVER PAI

Personal Information

Email	o.pai@ucla.edu
Phone	+1 858 922 3270
Website	olpai.github.io
GitHub	github.com/olpai

Education

University of California, Los Angeles — Los Angeles, CA
Pursuing Bachelor of Science, Computer Science (GPA 3.661) — Sep 2021–Jun 2025

Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Computer Organization, Software Construction, Linear Algebra, Discrete Mathematics

Experience

onTrack Dev Team (Creative Labs) — Los Angeles, CA
Frontend Developer | React, Redux, Material UI, Node.js, Jira, Git — Sep 2021–Mar 2022

- Wrote components and pages for a curriculum planning assistant targeted at UCLA's 45,000 students. Implemented a friendly interface with an aesthetically pleasing component library, displaying dynamic data of over 18,000 courses and 125 majors utilizing asynchronous requests and a centralized store.
- Participated in an agile development environment, creating pull requests for tasks outlined in weekly sprints by project manager. Practiced active cross-team communication to implement the design team's wireframes and connect the interface to the backend team's custom API.

Bruin Sports Analytics — Los Angeles, CA
Data Journalist | Tableau — Sep 2021–Dec 2021

- Wrote article to identify and define the rise of neo-positions in the modern NBA using league statistics. Published to the Bruin Sports Analytics website and visited by hundreds of monthly readers.
- Scraped and parsed data set of over 450 players on Basketball Reference. Used Tableau software to plot scatter charts of data. Modeled lines of best fit and analyzed data outliers to identify player strengths.

Qualcomm Wireless Research Division — San Diego, CA
Research Intern — Sep 2019–Mar 2020

*Interrupted by pandemic

- Consulted VP of Engineering during weekly planning meetings and routine check-ins to simulate Wireless Research Division's workflow for experimental projects.
- Collected data and modeled indoor heat map of WiFi speeds in a controlled environment. Analyzed impact of build material, router location, and infrastructure. Successfully modified test environment to improve signal strength by 30%.

W.A.R. Lords Robotics Team — San Diego, CA
Software & Design Senior Developer | Java, SOLIDWORKS CAD, Limelight Vision Camera — Sep 2017–Jun 2020

- Wrote control systems code using calculus-based PID theory to maintain accurate velocity, heading, and localization for the duration of a 2 minute match. Tuned vision tracking pipeline to enable Limelight camera software to identify targets 25 feet away.
- Trained 20 recruits in the Java programming language and SOLIDWORKS CAD software.

Projects

ZERO PODS	• Designed a Formula 1 stat and season tracker aimed at displaying concise information. Implemented a modern interface featuring interactive track graphics and filterable tables. • Queried historical and current results from 72 seasons with the Ergast Developer API. Deployed prototype via Heroku.	React, Redux, Node.js, NextUI *Under development
Brawl	• Created a 2D fighting game with local multiplayer capabilities. Encoded keys to avoid registering repeated presses by accessing event listeners. • Animated custom character graphics to display 10 intermediate movements every 20 milliseconds. Mapped hit box algorithm to register character damage. Implemented realistic jump mechanism with established physical constants.	HTML/CSS, JavaScript, JavaScript Canvas

Skills

Languages	C/C++, Java, JavaScript, Python, Bash
Web	React, Redux, Node.js, Material UI, HTML/CSS
Tools	CLI, Git, GitHub, Emacs, Jira, MySQL
Other	Markdown, Adobe CC (Premiere Pro, Lightroom), SOLIDWORKS CAD (Certified Associate, May 2021)

Honors

Member, California Scholarship Federation	Sep 2017–Jun 2021
Inductee, Cum Laude Society	Jun 2020
Recipient, National AP Scholar Award	May 2020
Winner, San Diego Regional Hack-Atari Hackathon	Dec 2017
Winner, IEEE Sumobot Competition	Aug 2016