

Ben Cuan

Hello! I am a student software developer pursuing an education in Computer Science and Psychology at UC Berkeley. Recently, I've been involved in teaching, full stack engineering, Linux, and game development.



contact@bencuan.me



<https://bencuan.me>



github.com/64bitpandas



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Education

University of California- Berkeley

August 2019 to May 2023 | Berkeley, CA | GPA: 3.92

Current 4rd year (Senior) undergraduate at UC Berkeley double majoring in Computer Science and Psychology.

> **Selected courses:** Data Structures (CS 61B), Data Science (Data 100), Probability (Stat 140), Efficient Algorithms (CS 170), Operating Systems (CS 162), Computer Security (CS 161), Database Systems (CS 186), Artificial Intelligence (CS 188)

Organizations: Open Computing Facility (OCF), CS Mentors (CSM), Bay Area Scientists in Schools (BASIS)

Experience

Capital One - Software Engineer Intern

June 2022 to August 2022 | San Francisco, CA | capitalone.com

- Designed and implemented a full-stack application using AWS S3, AWS Lambda, Elasticsearch, Python, and React/TypeScript to process and visualize internal patent data via a user-friendly dashboard
- Led development of API revision to create 10+ new routes; worked with Legal and Risk teams to handle sensitive data

UC Berkeley EECS - Undergraduate Student Instructor (uGSI)

August 2020 to Present | UC Berkeley | cs61a.org / cs186berkeley.net

- 3-time uGSI/Teaching Assistant, 2-time course tutor for CS61A (Structure and Interpretation of Computer Programs, serving ~1500 students per semester through introductory Python, Scheme, Regex/BNF)
- Current uGSI for CS186 (Database Systems), teaching advanced SQL and database design to ~500 students/semester
- Led discussion sections in problem solving every week for ~20 students; developed and reviewed course content

Open Computing Facility - General Manager/DeCal Head Facilitator

August 2019 to Present | UC Berkeley | ocf.io / decal.ocf.io

- As General Manager: led administrative functions and managed \$70k/year budget to run computer lab for thousands of students; worked with ASUC senators, campus administrators to secure \$100k+ future funding
- As Head Facilitator: developed lab materials for faculty-sponsored, student-run course on Linux System Administration (CS 198-008), on topics such as shell scripting, config management, Linux post-installation
- Updated course infrastructure to support automated provisioning and management of Ubuntu VM's for 150+ students

UC Berkeley ATDP - Instructional Assistant

May 2021 to August 2021 | Berkeley, CA | atdp.berkeley.edu

- Co-led development and instruction of advanced data structures course for 20+ high school students
- Created instructional homework assignments and projects from scratch in Java, including a maze generator/solver using graph traversal and Dijkstra's/A* algorithms, with integrated JUnit testing suites for autograding assignment submissions

Projects > For more information, please visit my site at bencuan.me

Trackversal | trackversal.com

Co-founder and full stack developer for the Trackversal project, a highly affordable hybrid Bluetooth-GPS asset tracking device. Created the mobile app (React Native) and backend infrastructure (Node.js, MongoDB). Backed by the CalHacks Fellowship and Berkeley Skydeck Hotdesk programs for pre-seed startup support.

Hackathon Projects | devpost.com/64bitpandas

Attended 8+ hackathons, employing rapid prototyping, design thinking, and various technologies including Arduino, WebVR, Heroku, Netlify, Docker. Won 1st place with CarrotCane, a DIY cane attachment for automated collision detection.

Skills

Languages: HTML/CSS/Sass/JS/Typescript, Python, SQL, Bash, C#, Java, Scheme, Go

Frameworks/Technologies: Node.js, React, Unity, NumPy, GNU/Linux, AWS (Certified Cloud Practitioner), Figma