Christopher Bannon

cbannon.com — www.linkedin.com/in/cbannon

EDUCATION

University of California, Berkeley

Berkeley, CA

Mobile: 707-761-4944

Bachelors of Arts in Computer Science — GPA: 3.6

August 2020 - May 2024

Email: bannon.c.35@berkeley.edu

• Courses: Algorithms, Data Structures, Operating Systems, AI, Computer Architecture, Data Science, Discrete Math & Probability, UI Design and Development, Machine Learning

EXPERIENCE

Computer Science Mentors (CSM)

Berkeley, CA

 $Junior\ Mentor o Senior\ Mentor\ (As\ of\ August)$

January 2022 - Present

- Structure and lead a weekly comprehensive review session for a group of **5-7** 61B students (Data structures and Algorithms)
- Present and model teaching demos to a 'family' of 5-8 Junior Mentors to strengthen their teaching abilities
- o Coordinate with a team of 15+ Mentor staff to plan and host course wide social events to 60+ 61B mentors
- $\circ\,$ Lead monthly course wide conceptual workshops open to up to $\bf 80~61B$ students

University of California, Berkeley

Berkeley, CA

Academic Intern (61A & 61B)

 $January\ 2022\ \text{-}\ August\ 2022$

- o Recognize and understand buggy student implementation and guide them towards a solution in weekly lab
- Present weekly topical 'mini-lectures' to groups of 30-40 students

PROJECTS

• Planit - React Native, Expo, Redux, Firebase, Node.js

Current

- \circ Co-Developing a scheduling application to integrate an individual's calendar with team scheduling operations
- Utilizing FirebaseAuth and Firestore to handle user registration and manage user data
- o Applying Firebase Cloud Notifications with Node.js to deliver reminders to users for scheduled events
- Employing Github actions to streamline testing and development See us on the Appstore this Spring!

• **Piggy** – React.js, CanvasJS

Summer 2022

- o Collaborated with a team of 5 to create a financial accountability mobile app (hosted on Heroku) in 3 days
- Helped design business logic components follow in order to track expenses, manage budgets, and plan goals
- Utilized React Hooks to manage component state and implement front-end interactivity

• NumC – C Spring 2022

- Used SIMD instructions and OpenMP parallelism to speedup matrix operations
- Developed an algorithm for matrix power operations using loop unrolling, cache blocking, and repeated squaring to achieve a speedup of **978 times** (top **94th** percentile)

• Gitlet – Java Spring 2021

- o Designed and implemented a Git clone using a hash-based file-structure
- o Functionality includes: add, commit, remove, branch, remove branch, commit, merge, and conflict detection

• Voice Controlled Car - C, Python, Energia

Spring 2021

- o Devised a closed loop feedback algorithm to ensure car stays on route given external stimuli
- Constructed band-pass filter to filter out unwanted frequencies and recognize 4 unique voice commands

SKILLS