


# Christopher Bannon

✉ [cbannon@berkeley.edu](mailto:cbannon@berkeley.edu)    [cbannon.com](https://cbannon.com)    [github.com/cbannon35](https://github.com/cbannon35)

## Education

---

University of California, Berkeley — GPA: 3.75

Aug 2020 – Present

*B.A. in Computer Science*

*Berkeley, California*

**Coursework:** UI/UX Design & Development, Data Structures, Algorithms, Computer Architecture, Operating Systems, Discrete Math & Probability, Data Science, AI, Machine Learning, Digital Design & Integrated Circuits

## Experience

---

UC Berkeley EECS — Undergraduate HCI Researcher

Sep 2023 – Present

- Programmed **ESP32** microcontrollers for use in low power sensing/broadcasting applications with **BLE** and **firebase**
- Experimented with functional bio-materials to create sustainable electronics and decomposable interactive systems
- **First author** publication **ACM C&C 2024** “A Toolkit for Crafting Simple Sonic Interfaces in Education” (to appear)

UC Berkeley EECS — Undergraduate Student Instructor (CS160)

Jun 2023 – Present

- Organized scope, sequence, and delivery of instruction on **HCI**, **UI/UX**, **web dev**, and **product design** curriculum
- Automated staff **Airtable**-to-email pipeline with **python**, servicing **hundreds** of requests
- Critiqued **500+** assignments/projects and received a **9.4/10.0** approval rating for **teaching effectiveness**

FavorX — Software Engineer Intern

May 2023 – Aug 2023

- Collaborated closely with the design team to polish **user-centric** interfaces and deploy solutions in **React Native**
- Scaffolded a **scalable** service using Expo’s API to upload profile pictures to a **secure url** in an **AWS S3** bucket
- Implemented and refined user’s ‘transfer tokens’ flow; used **redux** to **integrate firebase** with the **backend API**, resulting in **improved** asynchronous efficiency and state management

## Projects

---

Sailor – Swift Web Framework — *Swift, Python*

<https://github.com/SailorWebFramework>

- Developing ‘Compass’ a CLI tool to **generate, develop, and deploy** Sailor projects and modules
- Designing architecture for a centralized **dependency management** and **package installation** system

NYT Connections API — *FastAPI, MongoDB, Selenium*

<https://nyt-connections.up.railway.app/>

- Engineered a **RESTful API** that provides web scraped data from The New York Times’ Connections game
- Utilied **Github Actions** to asynchronously scrape and store data and introduced rate limiting to prevent abuse

ASCII Sandbox — *React, Typescript, FastAPI*

<https://github.com/Cbannon35/ASCII-sandbox>

- Built a **full-stack** web-app that **leverages Langchain** and **GPT** to query Figlet’s API to generate ASCII text

RISCV CPU with Audio Synthesizer — *Verilog, C, Python*

- Designed and implemented a 3-stage pipelined RISC-V CPU with integrated UART for tethering, using Verilog
- Integrated audio and IO components to the CPU system, via memory mapping, to create a functional audio synthesizer
- **Doubled** clock speed to **100MHz** by adding pipeline stages, smart forwarding, and BTFNT branch prediction

## Skills

---

**Certificates:** Jacobs Institute Certificate in Design Innovation, BCNM Certificate in New Media

**Computer Languages:** Python, C, Java, Swift, HTML/CSS, JavaScript, Typescript, RISC-V Assembly, Verilog

**Full-Stack Technologies:** React, Redux, Svelte, Expo, Tailwind, Bootstrap, FastAPI, MongoDB, SQL, Firebase