Ben Tomlin

bentomlin101@gmail.com   (510) 362-5617   bentomlin.dev   Linkedin   GitHub

🎓 EDUCATION

- Third year **Math-Computer Science** major at UC San Diego (3.6 GPA, expected graduation: **Dec 2024**)
- Relevant coursework:
  - Data Structures and Algorithms in Java, C, C++, Assembly
  - Software Engineering and Web Development (Agile, HTML/CSS/JS fundamentals)

💼 EXPERIENCE

Lead Developer Intern @Tramona `React` `Next.js` `tRPC` `Tailwind`   Oct 2023 - Present

- Spearheaded the development of tramona.com and co-led a team of 5 other developers, engaging in code review and pair programming and fostering a tightly knit vertical team
- Utilized shadcn/ui to create a custom component library using **Tailwind**, **Radix Primitives**, **React Hook Form**, and other libraries, leading to more a consistent design and faster dev velocity
- Used **tRPC**, **Zod**, and **Drizzle ORM** on the backend to handle input validation and database queries, and to integrate with the frontend via **React Query**, simplifying fullstack development and enabling more reusable components
- Designed the relational data model for **PostgreSQL** and maintained it by performing expand-and-contract migrations
- Integrated with Slack, Twilio, and AWS SES to send emails and texts to users and Slack messages to admins
- Used **Supabase Realtime** and **Zustand** to support in-app messaging between travellers and hosts

🛠️ PROJECTS

Minesweeper `React` `Next.js app router` `Tailwind` `Prisma ORM`   Repo Site   Sep - Oct 2023

- Used **React** and Typescript with **Immer Reducers** to create a robust and performant Minesweeper game
- Allowed players to switch between difficulties and save their high scores using the **localStorage** API
- Leveraged Next.js Server Actions and **Prisma ORM** to create a global leaderboard for each difficulty

donequick `SvelteKit` `Firebase` `Tailwind` `realtime` `noSQL`   Repo Site   Aug - Sep 2023

- Used Firebase **Firestore** to create a lists app with optimistic updates, reordering, infinite nesting, keyboard shortcuts, and **real time collaboration**
- Used Firebase **Auth** to sync user data to the cloud and let users invite each other to lists by email
- Leveraged Firebase **Security Rules** to support secure list sharing and client-side database queries

MCSR Ranked Stats `SvelteKit` `Tailwind` `data vis`   Repo Site   Mar - Jun 2023

- Consumed a **REST API** to make interactive **data visualizations** that help competitive Minecraft speedrunners (MCSR) understand and share their statistics
- Wrote several algorithms to parse, transform, and summarize raw match data to allow for more intuitive visualizations
- Serves **3,000+ visitors** and **40,000+ page views** per month

UCSD Courses `SvelteKit` `Python` `web scraping`   Scraping repo Site repo Site   Jan - Mar 2023

- Scraped **6,888** UC San Diego courses from **82** department pages, as well as **179** major codes & names
- Leveraged **Python/BeautifulSoup** to parse, clean, and **interlink** the courses, and to **generate Svelte markup**
- Designed and created a new course catalog that lets users search for departments, share links to course descriptions, hover over major codes for details, and click any mention of a course to jump to its description

PiggyBank `Figma` `UX design`   Figma File Prototype   Aug - Oct 2023

- Worked with a team to design and prototype a bill-splitting mobile app targeted towards college students
- Executed the entire **design process**, including user research, visual design, prototyping, and user testing
- Leveraged **Figma** components and styles to foster productive workflows and fast iterations

📍 SKILLS

Languages `HTML` `CSS` `JavaScript` `TypeScript` `SQL` `Python` `Go` `Java` `C` `C++`

Frameworks & Libraries `React` `Tailwind` `Next.js` `Next.js app router` `Svelte` `SvelteKit` `Firebase` `Supabase` `Twilio` `Stripe` `Prisma ORM` `Drizzle ORM` `React Query` `tRPC` `Zod` `React Hook Form` `shadcn/ui` `BeautifulSoup` `Puppeteer`