

Ian Brash

615-892-2385 | brash@usc.edu | Los Angeles, CA | [linkedin/iansbrash](https://www.linkedin.com/in/iansbrash) | [github/iansbrash](https://github.com/iansbrash) | iansbrash.com

EDUCATION

University of Southern California | B.S. in Computer Science | **GPA: 3.89** **Expected May 2024**

- **Coursework:** Software Engineering, Algorithms and Theory of Computing, Data Structures and Object-Orientated Design, Full-Stack Development, Discrete Methods in CS, Introduction to Internetworking, Embedded Systems, Computer Systems
- **Awards:** USC Viterbi Dean's List (Fall 2020/21, Spring 2021/22), USC Presidential Scholarship

SKILLS

- JavaScript, TypeScript, HTML, CSS, React, Tailwind CSS, Next.js, C++, Electron, React Native, Git, Reverse Engineering Obfuscated Code, Auth0, Prisma, Java, SQL, MySQL, Storybook, Chromatic, Express.js, Firebase, Docker, Twilio, Liquibase, GitHub Actions, OAuth, Python, Husky, AWS Lambda, API Gateway, CDK, S3, Route 53, Cognito, SES, SQS, RDS, CloudFront

WORK EXPERIENCE

Software Engineer | [CarbonLink Inc](#) **04/2022 - Present**

- Spearheaded frontend development of the platform and made key decisions regarding the architecture and tech stack
- Revamped the designer-to-dev workflow by automatically porting **Figma** designs to **Storybook** with **Chromatic** and **GitHub Actions**
- Designed and implemented an **event-driven SaaS API** using the **AWS Cloud Development Kit** built in **TypeScript**
- **Technologies:** Figma, Storybook, Chromatic, AWS Lambda, API Gateway, DynamoDB, SQS, ElastiCache, CDK

Software Engineer | [Pickle LLC](#) **06/2022 - Present**

- Created **dev, staging, and prod environments** for the website codebase with **CICD** using **GitHub Actions** and **Vercel**
- Implemented a multi-tenant login system using **Auth0** and **Auth0 Actions** to assign various levels of access to different user types
- Handled database migrations and changes using **Liquibase** and ported existing AWS infrastructure into **AWS CDK**
- Built strongly typed API with **Next.js**, **Prisma**, and **GraphQL** while ensuring code consistency with **Husky**, **ESLint**, and **Prettier**
- Delegated tasks among frontend developers to meet sprint deadlines and handled pull requests and merge conflicts with **Git**
- **Technologies:** Prisma, GraphQL, MySQL, Liquibase, GitHub Actions, Docker, Ant Design, Auth0, Vercel, AWS CDK, RDS

Cohort Developer | [LavaLab](#) **02/2022 - 04/2022**

- Collaborated with another developer, designer, and product manager to envision, execute, and present a startup idea in two months
- Parsed, aggregated, and stored IRS-compliant itemized e-receipts through Square POS systems using **AWS SES** and **Nodemailer**
- **Technologies:** TypeScript, React Native, Expo, Nodemailer, AWS SES, S3, DynamoDB, Lambda

Hackathon Organizer | [HackSC](#) **09/2021 - 08/2022**

- Assisted hackathon participants with technical issues and fixed production bugs throughout the two-day hackathon
- Created a hackathon-managing discord bot for the **600+ participants** using **Discord.js** hosted on an **AWS EC2** instance
- **Technologies:** TypeScript, Discord.js, AWS EC2, SSH

PROJECTS

Unidash | [Homework Dashboard for Students](#) **12/2021 - 01/2022**

- Aggregated assignments from Blackboard and Gradescope in under **15 seconds**, reducing time spent finding assignments by **95%**
- **Technologies:** Next.js, Vercel, Tailwind CSS, AWS Cognito, Lambda, API Gateway, DynamoDB

Trojan Checked | [Automatic COVID-19 Screener](#) **10/2021 - 11/2021**

- Built an API and **iOS Shortcut** to complete USC's student COVID-19 screener with **automatic delivery via SMS** using **Twilio**
- Reverse-engineered USC's student login API and Duo's Two-Factor Authentication with **Fiddler** and **Chrome Dev Tools**
- Achieved **1000+ user signups** over two months and completed the screener **1000%** faster than the average person
- **Technologies:** iOS Shortcuts, Fiddler, Chrome Dev Tools, Twilio, AWS API Gateway, Lambda, DynamoDB

Theta | [Checkout Automation Software](#) **06/2021 - 08/2021**

- Implemented a software licensing system with Discord-bindable keys via **Discord.js** and API authentication via **Lambda Authorizers**
- Optimized desktop performance using **virtualized lists** and **web workers** allowing hundreds of tasks to be run simultaneously
- Automated the checkout process on Amazon.com and Walmart.com using a **request-based flow** and a **TypeScript class system**
- Reverse-engineered complex obfuscated JavaScript code such as Amazon's **Metadata1** and Walmart's **VoltageEncrypt** encryption
- **Technologies:** Electron, React, Tailwind CSS, Discord.js, Fiddler, Chrome Dev Tools, AWS API Gateway, Lambda, DynamoDB

Trojan Confessions | [Anonymous Student Confessions](#) **04/2021 - 06/2021**

- Combined **Firebase Cloud Functions** and **Express.js** to build a hybrid **server/serverless REST API**
- Utilized **Puppeteer** to dynamically generate, save, and post customizable images to Instagram based on user input
- **Technologies:** Express.js, Heroku, Puppeteer, Firebase Realtime Database, Cloud Functions, React, Tailwind CSS