Anthony Chen

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🎓 Education

M.S. in Technology Innovation (Robotics Track)　　　　09/2025 – 04/2027 | Seattle, Washington
University of Washington
- **Award**: MSTI Merit Scholarship Awardee
- Interdisciplinary master's program merging engineering and business with a focus on product prototyping and innovation

B.S. in Computer Science　　　　09/2021 – 06/2025 | Los Angeles, California
University of California, Los Angeles (UCLA)
- GPA: 3.8 / 4.0
- Relevant Coursework: Software Construction, Computer Architecture and Organization, Data Structures & Algorithms, Algorithms and Complexity, Discrete Structures, Operating System, Computer Graphics, Programming Languages, Theory of Computing, Machine Learning, Artificial Intelligence, Natural Language Processing, Computer Vision

🧠 Skills

Javascript | TypeScript | Python | C++ | C | HTML | CSS | SASS | React | React Native | Next.js | Recoil | Redux | Express/Node.js | Tailwind | Git | AWS | Docker | Firebase | MongoDB | PostgreSQL | Oracle | PyTorch

💼 Professional Experience

Software Engineering Intern　　　　06/2023 – 09/2024 | Los Angeles, California
Ellison Institute of Technology
- Replaced command-line tools with a **Next.js** dashboard built using **TypeScript**, **Recoil**, and **NextUI**, enabling researchers to process cell images via server-side computer vision models, resulting in 100% increase in model usage
- Designed a scalable database schema and implemented the app architecture for a project lifecycle tracking tool, enabling the monitoring of 60+ research projects and new proposals, with support for custom approval workflows and future scalability
- Automated the upload of 500+ patient medical records using **Python** and REDCapCloud's **REST API**, reducing manual work and ensuring data integrity with automated testing, audit logs, and backups

Engineering 1 Instructor – Autonomous Rover　　　　09/2023 – 06/2025 | Los Angeles, California
UCLA Samueli School of Engineering
- Instructed students in designing and programming autonomous rovers to navigate an obstacle course and secure objects
- Presented lectures on essential concepts including SolidWorks, **C++**, **Arduino** programming, and circuiting/wiring

Web Developer　　　　02/2022 – 06/2022 | Los Angeles, California
UCLA Anderson School of Management Marketing & Communication
- Performed global-styling repairs and code maintenance using **HTML/CSS**, **SASS**, and **JavaScript**
- Managed event website for the Riordan Programs Anniversary with responsive web design principles to increase accessibility
- Incorporated **Agile** development methodology and used **Jira** Workflow to organize and track project tasks

📁 Projects

Autocreator
- Collaborated as part of a 3-developer team to create a full-stack web application designed to streamline social media content generation and scheduling, improving workflow efficiency for users
- Built responsive and secure frontend interfaces using **Next.js**, **Recoil**, and **Radix UI**, ensuring seamless user experience and integration with **NextAuth** for robust authentication and authorization
- Architected a scalable microservices backend with Express/Node.js and containerized Python workers using **AWS Lambda**, **SQS**, and **S3** to manage asynchronous content generation efficiently

LeoFitness - Backend | UCLA Creative Labs
- Architected **RESTful APIs** to enable **CRUD** operations for a workout plans and activities tracking app built with **React Native**, **MongoDB**, **Express/Node.js**
- Developed and deployed **MongoDB** database and backend Express/Node.js server infrastructure on **AWS Elastic Beanstalk**
- Automated API documentation using **SwaggerUI**, streamlining collaboration between teams for efficient testing and integration

Hitchhiker | LA hacks
- Led team of 4 developers to develop a travel advising app using **TypeScript**, **Next.js**, and **Firebase**
- Combined **OpenAI API** with advanced prompt engineering techniques to generate personalized travel plans for users
- Spearheaded frontend development, designed UI/UX in Figma and implemented the designs into dynamic web pages

Bruin Study
- Directed team of 5 to build a web application using PERN stack to help UCLA students find study partners
- Defined and tested own RESTful APIs using **Express/Node.js** and implemented and deployed a **PostgreSQL** database to **Heroku**
- Collaborated with 3 Frontend Developers and optimized main user interface rendering speed by an estimated 80%