

Andrew Lin Chang

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EDUCATION

The University of Texas at Austin

August 2021 – May 2025

B.S. Electrical and Computer Engineering

GPA: 3.71

Concentration: Software Engineering, Data Science and Information Processing

Coursework: Algorithms, Operating Systems, Software Design and Implementation, Discrete Mathematics, Probability and Random Processes, Linear Systems and Signals, Embedded Systems, Applied Statistics, Digital Logic Design

EXPERIENCE

Pinnova, Inc. – Software Engineering Intern; Houston, TX

June 2023 – August 2023

- Built edge server using MERN stack to validate, query, and manage client SQL databases, reducing workflow from hours to seconds
- Integrated REST API with existing client dashboard, providing consulting and data analysis services for clients in the oil industry
- Leveraged JSON Web Tokens and Passport.js to handle encryption of admin user login credentials and robust user authentication

Cockrell School of Engineering Ramshorn Scholars Program – Academic Mentor; Austin, TX

August 2023 – Present

- Taught weekly seminars for 20 first-generation college students from historically underrepresented and marginalized backgrounds
- Curated engineering curriculum challenge to make campus more accessible, 300+ students and faculty attended project showcase
- Led makerspace workshops in Texas Inventionworks to certify 40+ freshman engineers in CAD, 3D printing, laser cutting, soldering

PROJECTS

Student Organization Slack App – Slack Bolt SDK, Google Cloud Platform, Raspberry Pi, Node.js, Git

July 2023

- Developed Slack app using Google Calendar API to automate send weekly event updates by pulling from custom event calendars
- Created supplementary Google Apps scripts to integrate event lists app with Sheets, eliminating student organization pain points
- Hosted app server and deployed app to Slack workspace of 300+ active student members, improving member retention by 20-30%

Library Management System – Java, JavaFX, Scene Builder, MongoDB, Git

April 2022

- Engineered full-stack application for borrowing, returning, and persistently storing library users, books, reviews, and comments
- Designed a client-server software architecture and custom messaging protocol using Java web socket programming concepts
- Demonstrated multi-threading and observable design patterns to handle and accurately synchronize up to 100 concurrent clients

Keydrop – C++, React Native, Arduino, Firebase, Git

January 2022 – May 2022

- Prototyped IoT device and companion React Native app to share RFID keys between student housing and off-campus apartments
- Produced MVP using Arduino microcontroller, custom circuit board, and Firebase BaaS to read, write, and encrypt RFID UUIDs
- Awarded 1st place and “Best Overall” at Demo Day out of 150+ competitors and 15 teams, recognized by Austin tech entrepreneurs

LEADERSHIP EXPERIENCE AND ACTIVITIES

Institute of Electrical and Electronics Engineers (IEEE UT) – President

August 2023 – Present

- Organized professional development and info sessions with recruiters from Apple, Samsung, Optiver, etc. for 150+ ECE students
- Launched mental health initiatives with ECE department, connecting 200+ students with ECE professors and campus resources
- Raised over \$12,000 in funding to sponsor student trips to national IEEE conferences, connecting members with industry leaders

Texas Convergent – Build Team Technical Lead

August 2022 – May 2023

- Organized interdisciplinary hackathon with a team of 35 officers to the showcase startups and technical projects of 250+ students
- Led workshops on integrating React, Arduino, and Raspberry Pi IoT prototypes with cloud databases for 40+ weekly attendees
- Prepared 3 build teams for Demo Day presentations through individualized coaching sessions, resulting in 2 out of 5 winning teams

SKILLS

Programming languages: Java, JavaScript, TypeScript, Python, C, C++, HTML, CSS

Tools: React, React Native, Node.js, Next.js, Express.js, Tailwind CSS, Passport.js, Flask, Raspberry Pi, Arduino, MongoDB, Firebase, MySQL, Microsoft SQL Server, SQL, NoSQL, Git, GitHub, GitLab, ChatGPT, Postman, Webpack, AWS, LaTeX, MATLAB

Certifications: AWS Certified Cloud Practitioner

Work Eligibility: Eligible to work in the United States with no restrictions.