

Amrita Arun

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EDUCATION

University of Southern California

Expected graduation: Dec 2026

Computer Science, B.S., 3.7 GPA, Dean's List, Viterbi Merit Scholar

Los Angeles, CA

- Relevant Coursework: Intro to AI, Software Engineering (Java), Data Structures and Algorithms (Java/C++), Algorithm Design, Python Programming, Linear Algebra, Probability Theory

EXPERIENCE

Software Engineering Intern (Backend, Institutional Team)

June 2026 – Aug. 2026

Tradeweb Markets | New York, NY

- Incoming **backend-focused** software engineering intern on the Institutional team, working on high-performance systems supporting **electronic trading infrastructure**
- Collaborating with engineers to build and optimize backend services handling institutional client workflows and large-scale financial transactions.

Fullstack Software Engineering and Growth Intern

Jan. 2025 – Jan. 2026

Supaclass

- Built a secure, distributed code evaluation system with **Dockerized NestJS/React** services and **Gemini AI Code Execution agent** on AWS (ECR, ECS Fargate, S3, ALB), enabling in-browser Python execution. **Improved grading speed by 80%** with **<1 sec response time**.
- QA-tested 6+ new features** across grading workflows and UI components, identifying and documenting **50+ bugs/issues** that **reduced post-release errors by 30%** and improved overall platform reliability.
- Launched a **50+ participant pilot** including teachers across USC, UCLA, UCI, etc. by conducting product demos and organic outreach to educators, accelerating adoption across K–12 and higher ed while managing stakeholder communication and influencing early user feedback cycles.

Co-Founder and Developer / Director of External Community

Sep. 2024 – Present

USC LavaLab

- Selected as **1 of 14 developers out of 400+ applicants** in USC's premier student-run startup incubator.
- Mentored** two teams on product thinking and development, each winning **Audience Choice (\$500)** and **Best Traction (\$500)**, respectively

PROJECTS

SwiftMotionKit | SwiftUI, iOS, Open Source, Swift Package Manager

March 2026 - April 2026

iOS Engineer / Open Source Developer

- Built an **open source SwiftUI motion library** featuring a fully configurable swipe interaction system with velocity-based dismissal, **spring physics**, **haptic feedback**, and **gesture-driven animations**.
- Packaged and **distributed the library via Swift Package Manager** with documentation, demo app, and extensible architecture for future motion primitives.

Student Org Recruitment Management Tool | Spring Boot, Java, React, PostgreSQL

Aug 2025

Full Stack Web Developer

- Engineered a **full-stack web platform** with **Spring Boot REST APIs**, **React frontend**, and **PostgreSQL database** to process **300+** applications per recruitment cycle with secure **JWT authentication**.
- Designed and implemented an automated interview scheduling system supporting availability-based time slot generation, double-booking prevention, and email notification workflows. Leveraged database persistence, real-time scoring algorithms, and exportable applicant reports.

Due | React, Next.js, Node.js, TailwindCSS, Supabase (Postgres), OpenAI API, Langchain

Sep. 2024 - Dec 2024

Web Developer

- Developed a dynamic homework platform for middle school students that allows them to interact with their homework. Allows teachers to gain crucial insights into students' understanding through metrics such as frequently asked questions, keywords, etc., to modify their lesson plans.
- Implemented PDF parsing to generate homework assignments through **Langchain API** and integration with **OpenAI API endpoints** (GPT-4o, Whisper, Embeddings) to create an interactive and engaging learning experience. Worked with Supabase for the backend.
- Worked with 6+ educators and 50+ students across California.**

TECHNICAL SKILLS

Languages: Java, Python, Swift, TypeScript, JavaScript, HTML/CSS, SQL, PostgreSQL, C++

Frameworks: OpenAI/Claude/Gemini APIs, SwiftUI, Springboot, React.js, Next.js, Nest.js, Tailwind CSS, AI Tools, Langchain

Developer Tools: AI IDEs (Cursor, Windsurf), Claude Code, Google Firebase, Supabase Docker, VS Code, PyCharm, IntelliJ, Android Studio, XCode

AWARDS

USC RealityShift - First Place Winner

Awarded **first place** in a **university-wide** extended reality (XR) **pitch competition** for designing a socially responsible XR solution that supports K-12 children with high-functioning autism through an **AI-powered** mobile app and VR experience. The platform enables children to practice real-life social scenarios while giving speech therapists access to a connected web portal for tracking progress and reviewing behavioral insights.

CreateSC Nationwide UI/UX Designathon - Third Place Winner

Placed **3rd** out of **100+ competitors** as a solo participant at **USC's Nationwide** annual designathon, competing against teams of up to 4 across 3 tracks. Built Verso, a reading app that transforms margin annotations into a living spatial canvas of your thinking, fully designed and prototyped in Figma Make in under 36 hours.