Amrita Arun

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EDUCATION

University of Southern California

Computer Science, B.S., 3.6 GPA, Dean's List

Expected graduation: May 2027

Los Angeles, CA

Relevant Coursework: Discrete Methods in Computer Science, Accelerated Python, Data Structures and Algorithms

EXPERIENCE

Fullstack Software Engineering and Growth Intern

Jan. 2025 – Present

Supaclass

- Conducted demos and organic outreach to K-12 teachers and university professors, creating a 20+ participant initial pilot
- Implemented LTI 1.3 integration to support automatic user authentication and contextual launches from LMS platforms (e.g., Moodle), removing the need for manual login and enabling dynamic personalization in the frontend.

ShiftSC Incubator Initiative Lead

Jan. 2025 - Present

ShiftSC.

- Singlehandedly developed a semester's worth of curriculum from scratch for 70+ members, leading groups to create passion projects in ethical technology and educating members on gaining traction and continuing their projects long-term.
- Planned and led the EthicAI Case Competition: Transforming Healthcare Responsibly event, where teams of 2-4 participants designed tech-related Minimum Viable Products through an ethical lens to address a hypothetical healthcare issue. Engaged 60+ participants from over 20 different majors and minors, fostering interdisciplinary collaboration and ethical problem-solving in technology.

Co-Founder and Developer

Sep. 2024 – Dec. 2024

USC LavaLab

- Founded Due, a platform that allows teachers to bring AI into their classrooms to transform homework into a dynamic and engaging learning experience.
- Collaborated with co-developer, designer, and product manager to bring Due to life.
- Selected as 1 of 14 developers out of 350+ applicants in USC's premier startup incubator.

PROJECTS

<u>Code Comparison Tool</u> Dec 2024

Full Stack Web Developer

- Developed a full-stack web application that detects unauthorized code usage by comparing students' code against class materials.
- Built frontend using Next.js, React, and TailwindCSS. Designed the backend with FastAPI, integrated Axios for RESTful API calls and handled
 multipart file uploads to process and analyze user submissions effectively.
- Implemented a custom algorithm in Python to highlight unmatched methods in student code for easier visual inspection.

<u>Due</u> 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 student understanding through metrics like questions asked frequently, keywords, etc., to modify their lesson plans.
- Implemented PDF parsing to generate homework assignments through Langchain API and integration with OpenAI API endpoints (GPT-40, Whisper, Embeddings) to create an interactive and engaging learning experience. Worked with Supabase for the backend.
- Working with 6+ educators and 40+ students across California.

PandaSpeaks
Aug. 2021 - June 2022

Mobile App Developer

- Developed an Android app that helped children with non-verbal autism practice communication skills.
- Built a speaking feature that checked user speech, a feature for listening comprehension, and a conversation feature.
- Worked with Java/XML, Firebase, Google Speech-to-Text API

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript, HTML/CSS, Swift, Typescript

Frameworks: React, Next.js, Nest.js, TailwindCSS

Developer Tools: Google Firebase, 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 a 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.