SANATH KAVATOORU

Boulder, Colorado — sanathkavatooru@gmail.com — +1 303 414 0846 — linkedin — github

Experience

University of Colorado Boulder — *Boulder, Colorado*
Web Developer — *Jan 2025 – Present*

- Converted 4 Wolfram Mathematica models into browser-ready simulations with SVG.js, HTML5, and CSS, giving 1,200 LearnChemE users hands-on access and cutting load time 40%.
- Designed 6 high-impact lab experiments as interactive demos after video and experimental result analysis, cutting support requests by 30%.

AirAsia MOVE — *Bangalore, Karnataka*
Software Engineer — *Feb 2022 – Jul 2024*

- Refactored 15 legacy screens into 32 reusable Phoenix views (internal AirAsia UI framework), deleting 2.6K lines of duplicate code and cutting future UI build time 35%.
- Migrated chat services from Sendbird to in-house backend services leveraging Combine and UIKit saving $12k/yr in licensing.
- Authored a streaming GIF module with CGImageSource/CGImageDestination, dropping peak memory per chat thread 65 % and keeping animations smooth.
- Integrated SBTUITestTunnel to run automated 50+ UI tests on every build and speed up releases.
- Extended the Ruby test pipeline to post real-time pass/fail reports, helping the team spot issues and reduce bugs finding time by 50%.
- Built a social-profile screen and refactored chat to support themes, fonts, and wallpapers adopted by 60% of monthly active users within 30 days.

Projects

URL Shortner — *Live Demo*

- Architected a full-stack URL shortener in ReactJS and Spring Boot micro-services on GKE, delivering branded links with custom aliases, expiry dates, passwords, and geo-based access rules.
- Deployed containerized APIs on Google Cloud (Docker + Kubernetes) with PostgreSQL storage.

Face Filter Application — *GitHub*

- Crafted an iOS app using Swift, UIKit, and ARKit that detects facial-hair landmarks and overlays customizable moustache filters in real-time.
- Enabled video recording with AR filters and auto-saved each clip under a user-defined tag inside the app for easy retrieval.

Business Management Data Platform — *GitHub*

- Created a full-stack web app with ReactJS + NestJS that lets small vendors track inventory, sales, and profit/loss dashboards.
- Deployed containerized APIs on Google Cloud (Docker + Kubernetes) with MongoDB storage.

Skills

Languages: Swift, JavaScript, Python, C++, SQL

iOS Frameworks: UIKit, SwiftUI, Combine

Web & Backend: ReactJS, Django, Node.js, Docker, CI/CD (GitHub Actions), Fastlane

Tools & Design Patterns: Xcode, Git, App Store Connect, TestFlight, VSCode, MVVM

Networking & APIs: REST (URLSession, SDWebImage)

Education

University of Colorado Boulder — *Aug 2024 – May 2026*
Master's in Computer Science — *GPA: 4.0/4.0*