

Yicheng Gong

Software Engineer

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EXPERIENCE

Meta

Senior Software Engineer, Reality Labs

Dec 2021 - Present

- Built a job scheduler framework that creates AI generated unit tests for Reality Lab across 5 languages and 40+ teams, increasing unit test coverage to 80%+ per team. Contains various quality gates, such as AI slop detection, rubric-based quality grading, deterministic test execution and test coverage extraction.
- Led 0 -> 1 initiative for a standalone VR system media player for rectilinear, 3D and immersive playback using React Native and Android. Added 300k new MAU and increased +6.63% 1P video streaming time, +4.0% media time for new Quest users, and +0.99% Quest time among media-primary users.
- Led 0 -> 1 initiative for auto server-driven 2D to 3D media conversion via custom ML models for VR Gallery app. Built new UI components for rendering 3D and Apple's Spatial media formats, used across Facebook, Instagram, and Gallery in VR. Built new media upload flow for Twilight iOS and Android app, lifted iOS uploads +343% and Android uploads +1511%
- Built advanced player UI and system features needed for partners, such as Disney, Dolby, Youtube, for initiatives such as cwatching and transactional video on demand (TVOD). Responsible for unblocking the exclusive Avatar 3 trailer release on VR for Connect 2025.
- Rewrote telemetry tracking and launched quality and performance initiatives on Quest TV app. Reduced P90 video start time by 1 seconds, pagination time by 0.5 seconds, search time by 1.5 seconds, app initialization error from 25% to 2% and crash rate from 50% to 1%
- Implemented support for different deeplink protocols, such as content uri, for VR media player, enabling integrations such as google drive preview.
- Designed an unique autoplay experience for immersive VR and rectilinear videos that improves transitions for better UX, which increased media time spent by 5%.
- Designed embedded media player SDK, using AIDL one-way IPC, virtual-display rendering, and lifecycle isolation to enable spatial in-context/PIP playback for first-party apps, with extensionability for third party apps.
- Led 2 major migrations of Quest TV app, first from a legacy ReactVR runtime to standard React Native, then from Android service to Android Activity. Redesigned 12 native C++ and Java modules as well as UI components.

LinkedIn

Senior Software Engineer, Profile Platform

Sep 2020 - Dec 2021

- Built API-driven UI components and schema-compatible infrastructure across Web, Android, and iOS.
- Improved site speed 5-10%, parallelizing Profile data fetching over HTTP/2 and implementing scalable scroll restoration across the Profile web ecosystem.
- Drove flagship migrations and media tooling, including large dependency upgrades, modular UI/business-logic utilities, WebGL photo filters, profile-video captions, and ember-scroll-modifier performance work.

Software Engineer, Profile

Aug 2018 - Sep 2020

- Served as Web lead for Profile redesign and accessibility, leading Profile to Grade C accessibility rating with 30+ production fixes and coordinating 2 additional web engineers.
- Maintained open source ember-sortable drag-and-drop library, adding keyboard navigation, screen-reader support, focus management, and other accessibility features for LinkedIn users.
- Strengthened Profile infrastructure, laying groundwork for Microsoft Bing Geo migration, enabling 2 engineers to contribute, implementing strict component namespacing lint rules, and mentoring 3 engineers.

Software Engineer / UI Engineer Intern, Profile

2017 - 2018

- Reduced Profile page-load and photo-editor overhead, migrating major data models and building a WebGL plugin that accelerated LinkedIn photo-editor render performance by >5x.

EDUCATION

University of Illinois at Urbana-Champaign - B.S., Computer Science

2014 - 2018