



SKILLSWAPXR

W. S. N.
FERNANADO

A VisionOS App for Peer-to-Peer Skill Sharing



The Problem

KNOWLEDGE GAPS IN THE AGE OF RAPID SKILLS GROWTH



- Learners often lack affordable and personalized skill training options
- Many individuals have skills to teach but no platform to share them
- Traditional platforms focus on passive learning, not immersive experiences
- Peer-to-peer exchange is underutilized in today's learning ecosystem





The Solution

A SPATIAL APP THAT ENABLES SKILL EXCHANGE

- Users can offer to teach skills and request to learn others
- Entirely local, privacy-respecting — no login or backend required
- Built for visionOS: immersive, intuitive, and accessible
- Supports media-rich content like video and PDFs for each skill



Key Features

- Immersive 3D UI for spatial browsing
- Skill exchange with matched interests
- Local CoreML prediction to auto-categorize skill offers
- Attachments: upload PDFs or videos with your offers
- No Firebase: Fully functional offline using UserDefaults



Target Users

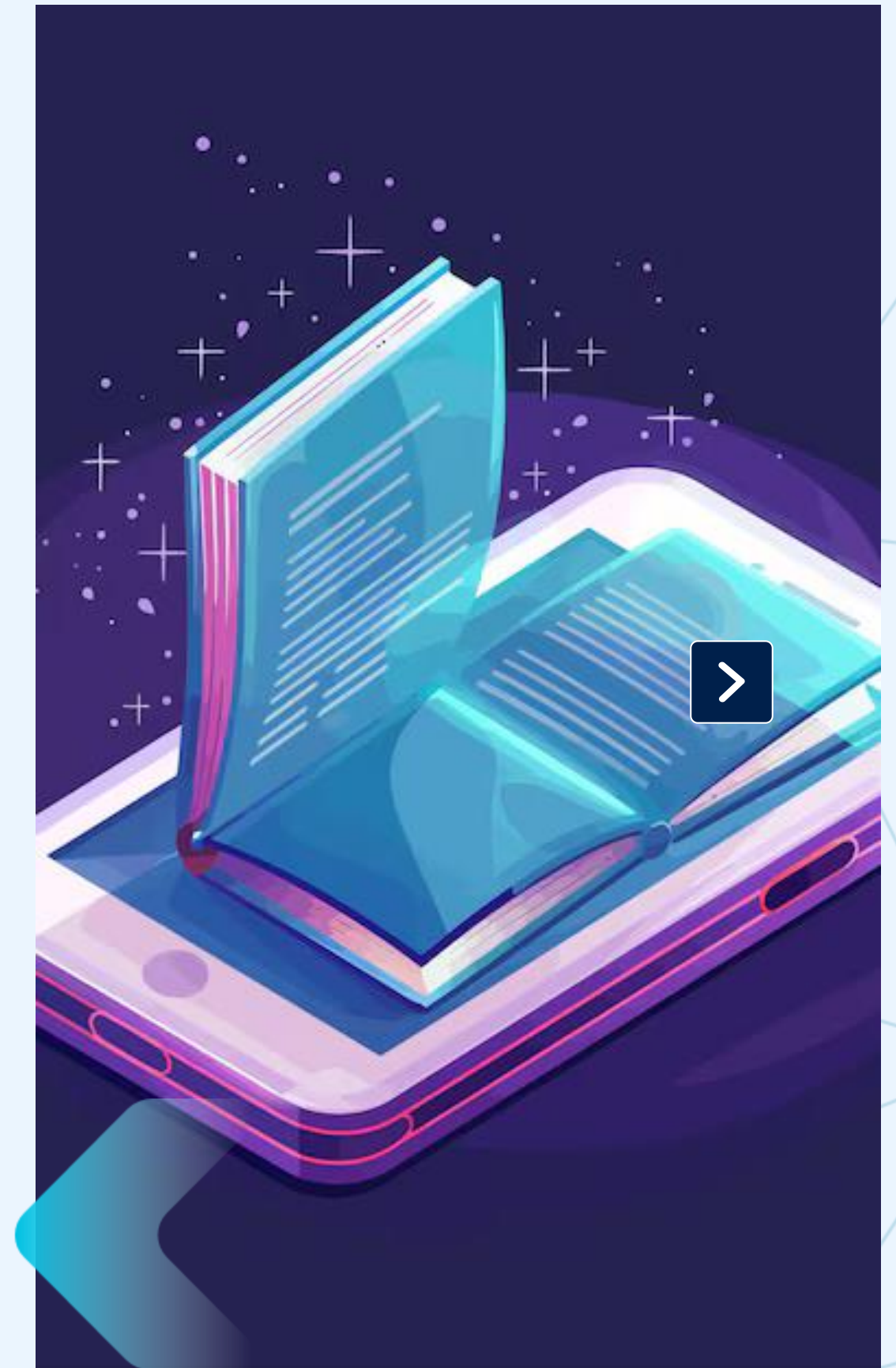
SkillSwapXR connects **students** seeking peer tutoring, **professionals** upskilling by teaching, **hobbyists** exchanging creative skills, and **visionOS enthusiasts** exploring spatial learning in action.



Technical Architecture

BUILT WITH SWIFTUI + VISIONOS + COREML

- SwiftUI for spatial UI design
- UserDefaults + @AppStorage for local persistence
- Modular architecture with reusable data stores

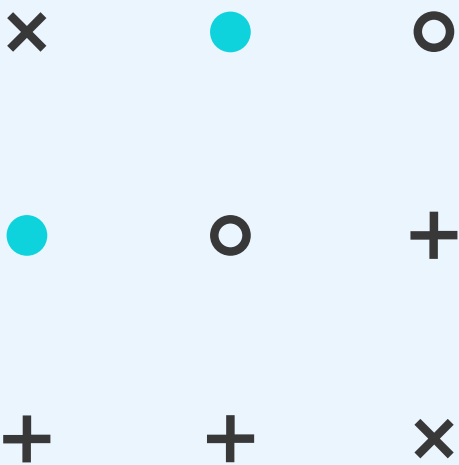


Demonstration Highlights



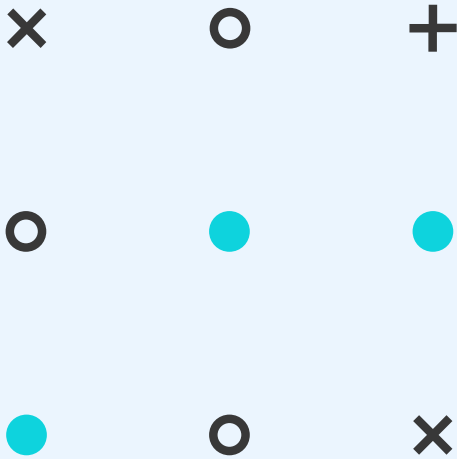
- SkillFeed View – View exchange offers in stacked immersive layout
- Create Offer View – Auto-categorize your offer using ML + add drawing
- My Courses View – Access accepted offers with resource files
- Profile View – Manage your skills and posted offers





Future Vision

- Add CloudKit support for cross-device sync
 - ARKit to visualize live collaborative sessions
 - Real-time matching engine for skill exchange
 - Expand media support to include 3D and Reality Composer assets



The background is a gradient of blue, transitioning from a lighter blue on the left to a darker blue on the right. On the left side, there are several 3D objects: a large, curved, translucent blue and purple shape, a smaller blue and purple sphere, and a blue and purple ring. On the right side, there is a blue and purple ring and a blue and purple sphere. The text "THANK YOU!" is centered in the middle of the image.

THANK YOU!