

# Steven Strange

iOS Developer

## PROFILE

iOS developer with over 5 years experience building intelligent, well crafted mobile experiences. Passionate about combining on device AI, computer vision, and thoughtful UI design to solve new problems in creative ways. Experienced with Swift, Core ML, and ARKit for developing innovative, high performance apps.

## PERSONAL PROJECTS

### High-Resolution Image Compositor iOS app 2025- present

- Developing an iOS app that creates super-resolution composite images by aligning multiple telephoto frames to a base wide-angle shot using the SIFT algorithm
- Implemented multi-frame alignment and blending to produce ultra-detailed results similar to a bidirectional panorama, optimized for Apple Silicon performance
- Implemented a real-time preview system with a lightweight alignment algorithm for responsive capture and composition

### On device AI dog translator iOS app - 2025

- Developed an iOS app combining five on-device AI models (VLM, LLM, ASR, TTS, CNN) to infer and translate dog behavior into natural-language “thoughts.”
- Integrated MLX/MLXVLM, Apple Foundation Models, Vision, SoundAnalysis, and Speech frameworks in a unified low-latency pipeline optimized for Apple Silicon

### Convolutional Neural Network For Detecting Brain Tumors In MRIs - 2024

- Collaborated in a team of three to design and compare a custom CNN with a transfer learning-based model for MRI brain tumor detection and classification
- Designed, trained, and optimized CNN architectures for tumor detection, achieving a 16.5X faster training iteration time
- Improved workflow efficiency by optimizing data loading and preprocessing pipelines in Google Colab

### Dynamic Dolly Zoom Camera iOS App - 2024

- Built an app that tracks eye distance and auto-adjusts zoom to create a smooth dolly-zoom effect like in Severance
- Used ARKit and AVFoundation for real-time tracking and cinematic video capture

### **Brain Model Estimator iOS App - 2023**

- Built an iOS app that estimates skull circumference using ARKit face measurements to approximate brain volume
- Generates a 3D-printable brain model scaled to each user's estimated dimensions for educational and visualization purposes

### **iPhone-to-Vision Pro Keyboard Bridge iOS / VisionOS app - 2023**

- Created an app that connects an iPhone to Apple Vision Pro via Bluetooth/Wi-Fi (MultipeerConnectivity), allowing the iPhone keyboard to input text on Vision Pro

## **PROFESSIONAL PROJECTS**

### **AR Glasses With Real Time Shadows - 2025**

- Worked for a client to build an app that utilizes ARKit to display glasses on a users face
- Implemented lighting aware shadow casting using depth buffers, PBR materials, and head pose smoothing

### **Open3D iOS Port And Face Scanner- 2025**

- Converted Open3D C++ pipelines into an iOS compatible static library
- Provides geometry processing, ICP alignment, and point cloud utilities through a Swift accessible Objective C++ wrapper
- Implemented RGB D + depth fusion, ICP alignment, camera pose tracking to perform face scanning

## **EDUCATION**

Kent State University — Bachelor of Science Computer Science, 2024

## **SKILLS**

**Languages:** Swift, Python, C++

**Frameworks:** SwiftUI, Core ML, ARKit, Vision, AVFoundation

**AI & ML:** On-device AI, VLMs, LLMs, CNNs, SIFT, OpenCV

**Specialties:** iOS Development, Computer Vision, AR/VR, Real-time Processing, User interfaces