

ACTIVE VISION

A real-time solution that leverages computer vision to track the tennis ball, court, and player movements.

—bringing pro-level tennis insights to any court, instantly



To enhance tennis performance with smart vision.

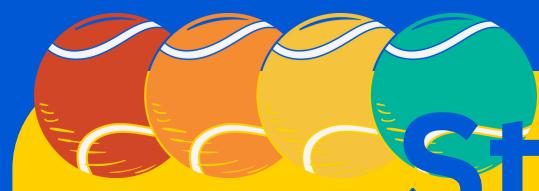
We aim to provide detailed, data-driven insights to revolutionize tennis training, helping users optimize their mechanics and elevate performance.



Available on Android app

Real-time Feedback

Data-Driven Training



Stakeholders

Android phone user:

Enjoy smooth access on Android with an intuitive interface designed for everyday, non-tech users.



Advanced tennis player:

Track ball speed and key stats in real time to challenge yourself and crush personal bests.



Tennis beginner:

Improve faster with smart visual feedback and instant setup—no hassle, just play.

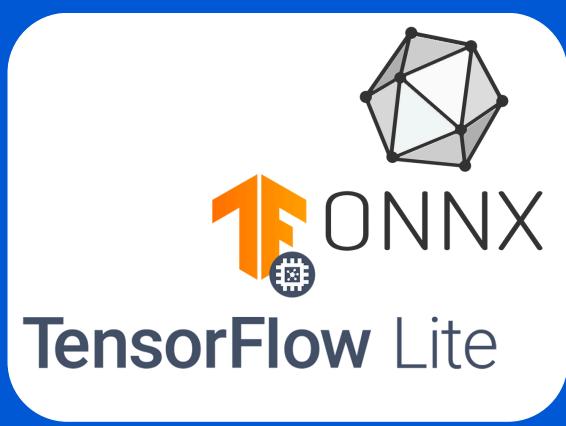


Tennis coach:

View live ball landing zones and player data to streamline training and analyze matches efficiently.

Implementation summary

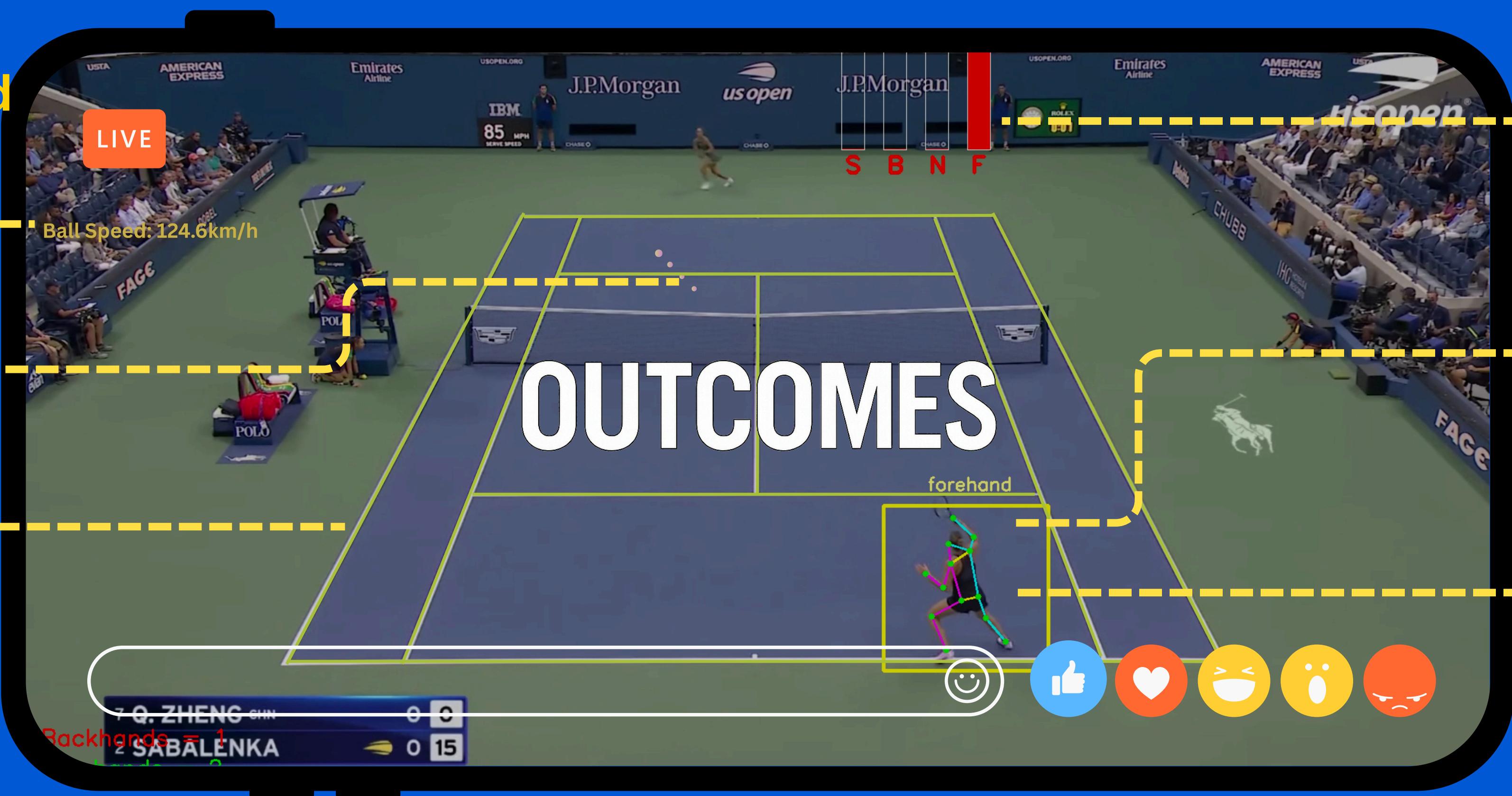
1. Integrated ball tracking, player detection, pose estimation, and court detection models
2. Converted and optimized models for Android deployment



TensorFlow Lite

3. Enable real-time performance on mobile
4. Implemented ball speed calculation
5. Designed a clean, user-friendly interface for seamless interaction

Ball Speed



Swing Recognition

Ball Trajectory

Player Tracking

Court Detection

Player Skeleton

Impact



Accessible Tech: Easy access from any Android devices, no extra costly gear.

Smarter Training: Real-time tracking for players, swings, and courts for data-driven practice.

Better Coaching: Gives coaches instant insights to refine techniques and training plan.

Scan here to watch video!

