

AI Soccer Game Analyzer

Executive Summary

Challenge: Grassroots soccer clubs lack affordable, automated analytics to derive tactical insights from match video.

Solution: AI-powered detection, tracking, and highlight-reel generation in one dashboard—runs on free Colab.

Key Metrics:

Player detection $\text{mAP@0.5} \geq 70\%$

Ball detection $\text{mAP@0.5} \geq 60\%$

Highlight reel generation ≤ 3 min per match

Benefits:

Coaches: Data-driven training adjustments

Players: Enhanced recruitment exposure

Parents/Fans: Engaging video highlights

Roadmap (6 weeks): Dataset → Fine-tuning → Tracking → Analytics → UI → Evaluation