

# Open FC

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This project addresses the problem of expensive sports cameras for small teams unable to cover the over 3k per season subscriptions. The hardware required for this project includes a Raspberry Pi, four Arducam cameras, and a Cammarray Camera HAT to record the video. OpenCVSharp will be used to stitch the four videos the cameras record together and create a panorama, detect objects of interest, and crop each frame to get maximum resolution on just the area of interest. To ensure the system is robust to the rigor of outdoor use a vertical 6" PVC pipe will be used as the housing and will hold various 3D print parts. To compete with the current solution, Machine Learning will be used to analyze and optimize the video.