

ALTO: Advanced Learning Techniques for Almond Sorting and Optimization





Scan QR code to detect almond quality in real-time using mobile phone

Objective

- Development of an AI-based model for the grading and segregation of almonds.
- Integration of developed algorithm with hardware for sorting almond kernels
- Real-time detection of the quality of almonds kernels using mobile phone

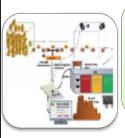
Execution of project



Step-1: Development of a data-set for almond kernels

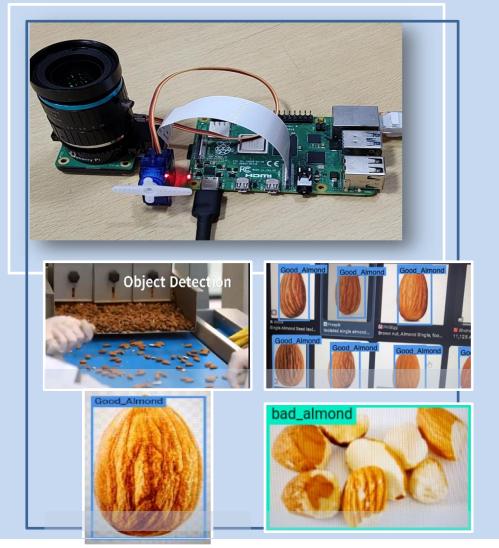


Step-2:Model Training using Deep learning techniques for the grading of almond kernels



Step-3-Integration of software model with hardware (raspberry-pi, camera and servo motors) for sorting of almond kernels

Work Done



Software

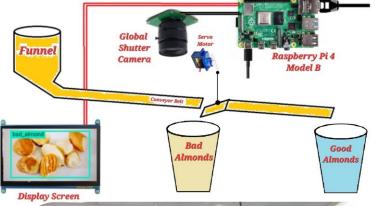
Anaconda/ (YOLO V-8, Tensor Flow Mobilenet FPN 320 *320)

While the FPN 320 *320) VNC viewer, Putty, RoboFlow, jupyter notebook.

Hardware

Raspberry-pi ,GS-Camera, Servo motors, Ethernet cables

Proposed Model







Scan QR code for project information

Team members

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