



DELIVER SMARTER: MAIXSENSE A010 MEETS AHAMOVE

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OBJECTIVE

Build a small, low-cost tool that measures a parcel's length/ width/ height in seconds and instantly syncs it to the Ahamove Driver App—so drivers can pack smarter and finish routes faster.



BACKGROUND & MOTIVATION

Ever tried packing a suitcase without knowing how big your items are? That's how many delivery routes work today, drivers get the weight, but not the size. The result: empty gaps in vans, extra trips, and more time on the road. Our solution is a simple, portable device that measures a parcel's length, width, and height right at pickup.



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METHODOLOGY

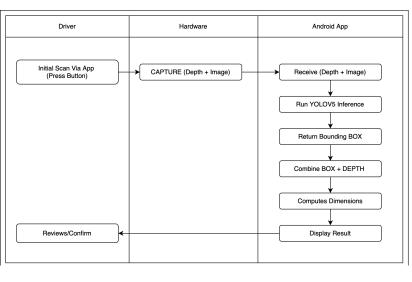
PCB Design



CAD Design



User Interaction



ANDROID APP System Architecture YOLOV5 Display Dimension HARDWARE ESP32 BLE Communication Depth Data OV2640 Camera ANDROID APP System Architecture Maixsense A010 3D sensor (TOF Data)

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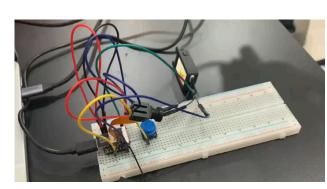
FINDING & CONCLUSION

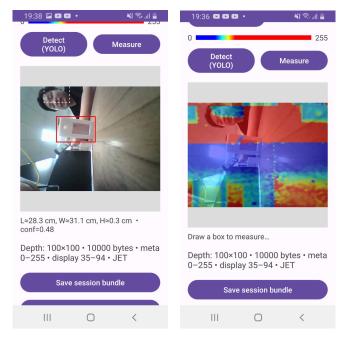
- End-to-end flow works in real pick-ups (camera → BLE → on-device AI → overlay → order auto-fill).
- Results are consistent with manual checks on common parcels; Bluetooth stays stable with quick recovery.
- Drivers report faster handovers and fewer disputes.
- Portable, low-cost, app-integrated—ready for pilot rollout

EXPERIMENTS & RESULT

Experiment: Prototype + app measured a box with camera+depth.

Result: Detected box, overlaid depth, showed size (~28×31×0.3 cm); end-to-end BLE pipeline works.





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