Human Detection and Localization

Product

Perception System for G2P Robots that can detect and track humans in front of the robot.

Stakeholders

Acme Robotics Delivery Robot Group.
The consumers are logistics and delivery companies that require such delivery robots.

Capabilities

HDAL can detect humans using with a detection model and can process the coordinates of the humans with respect to the camera frame.
- Uses only a monocular camera for all operations.
- Uses Geometric CV methods for localization, giving us a reliable and repeatable output.

Measures of Success

The system should reliably detect humans at a reasonable distance when they are in frame.
Measured by the model's accuracy.
The system should also be able to track the humans properly.
Measured by the difference in the estimate of position vs the real position.