$get\ image\ from\ camera$

$FOR\ all\ color\ channels$

$get\ thresholded\ binary\ image$

$open\ binary\ image(optional)$

$get\ set\ of\ bounding\ rectangles$

$grow\ set\ of\ bounding\ rectangles$

END

$FOR\ every\ color\ combination\ channnel\ A\ and\ channel\ B$

$largestTarget.size = 0$

$FOR\ i = 0\ \ to\ numBoundingRectanglesA$

$FOR\ j = 0\ to\ numBoundingRectanglesB$

$IF\ boundingRectanglesA[i]\ \cap\ boundingRectanglesB[j]$

$IF\ boundingRectanglesA[i]\ \cup boundingRectanglesB[j]\ > largestTarget$

$largestTarget = boundingRectanglesA[i]\ \cup boundingRectanglesB[j]$

END

END

END

END

END

$FUNCTION\ grow\ set\ of\ bounding\ rectangles$

$FOR\ every\ bounding\ rectangle\ in\ the\ set$

$\delta_{width} = factor * width$

$\delta_{height} = factor * height$

$rectangle.width\ += \delta_{width}$

$rectangle.height\ += \delta_{height}$

$rectangle.x\ -= \frac{\delta_{width}}{2}$

$rectangle.y\ -= \frac{\delta_{height}}{2}$

END