

Tracking juggling balls using the Kinect

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1 A Juggling Robot

2 Hough Transform

3 Kalman Filter

4 Our plan

Let's go

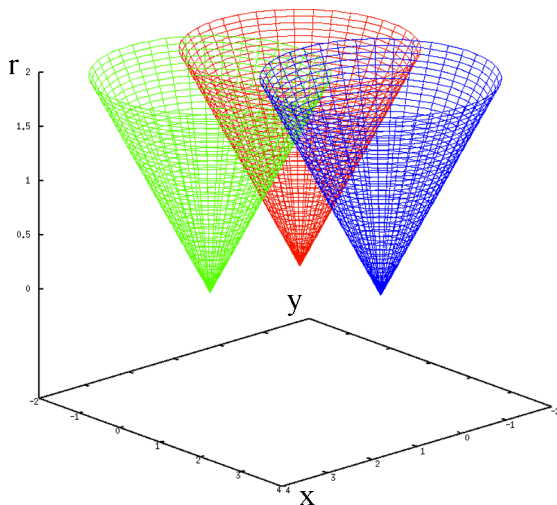
FIXME: Paper
maybe abstract

FIXME

FIXME

Hough Transform

FIXME: Thiemo



Kalman Filter

sub

FIXME: Rolf

Conclusion

Video + paper conclusion

IN: $rgb + z$

- eliminate background in z
- search local maxima in $z \rightarrow$ ROIs
- use ROI mask on rgb
- Hough transform on rgb
- Match corresponding balls in multiple frames
- Kalman filter for each ball

Challenges

- Local maxima
- Multiple balls (colour?)

The end

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