Autonomous flying drone for building surveillance
Topic Motivation

- Use AR drone for building surveillance
- Addition to existing watchmen
- Fly a predefined path through a building
- Video stream of the drone's camera image to the guard-room
- Take pictures of points of interest for security archive
- Learns map of the route for case of occluded waypoints
Done so far

- Read image stream into OpenCv images
- Find red lines in the image
- Extract vector path from lines
- Concept for Map
- Implemented basic control node
What comes next?

• Actually follow the line
• Find crossways
• Send waypoints out of EKF to Map
• Implement battery monitor
• Include ar_recog for marker recognition
• Include marker database for EKF position correction