Fast landing on moving vehicle

Navigation for Flying Robots - Free style project

Team "Roter Baron"

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What we wanted to do…

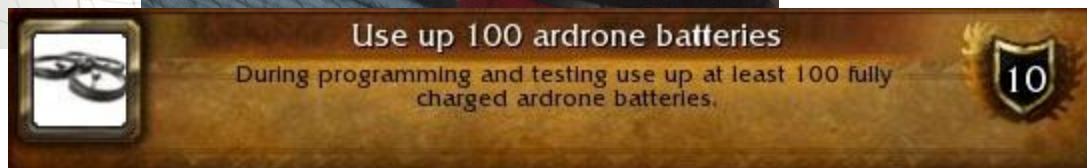| Our goals	status
approach target from behind	[done]
use **Ubitrack** library to identify recursive markers	[done]
integrate Ubitrack into ROS	[failed]
do a **precise** landing (with recursive marker)	[failed]
use **magnets** to fixate the drone on the platform	[todo]
do **fast landing**	[done]
stabilize drone with **PID controller** (and odometry)	[done]
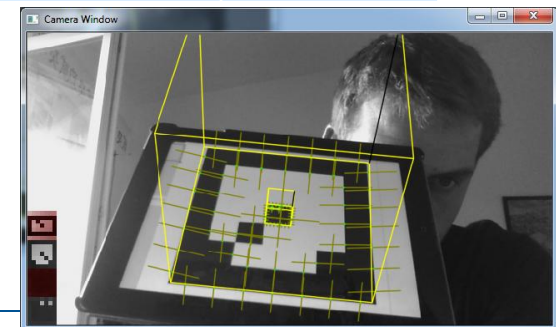
…what we actually did
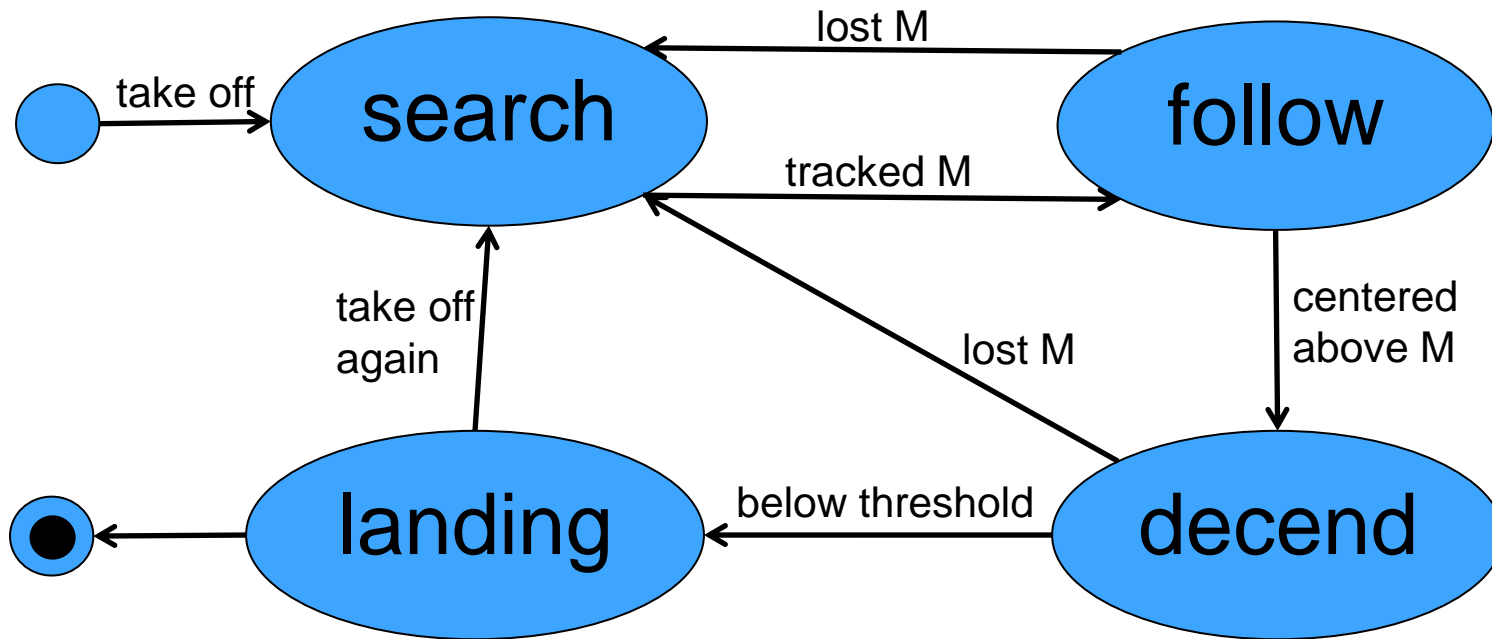
* M means marker

What we learned during the project

- programming in ROS really **challenging** ☺
- ardrone is **fun** to play around with
- learned about **pitfalls** in Linux/ROS (+ 3rd party libs)
  → correct/matching versions important

- debugging in robotics really **frustrating** ☹
- **massive problems** with the drone (driver, batterylife)
- could not achive all planned **goals**…
  → „those are more like guidelines than actual rules"

How testing looked like…
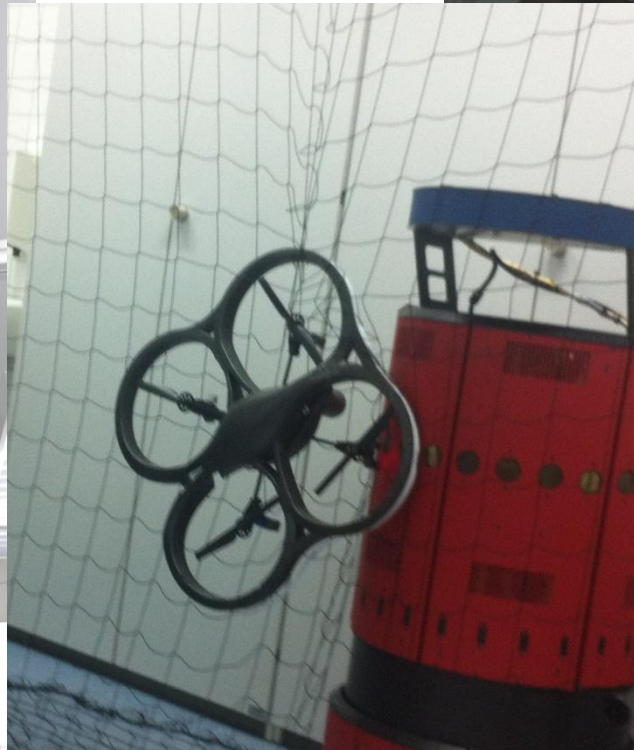
Use up 100 ardrone batteries
During programming and testing use up at least 100 fully charged ardrone batteries.

Video results

- check it out on youtube:

http://www.youtube.com/watch?v=ObNsXorN4Kk