

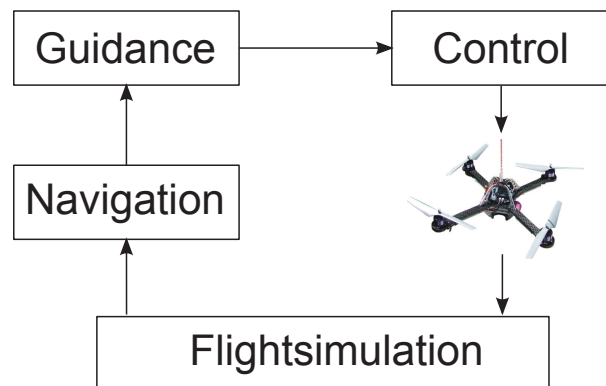


Quadrocopter-Simulation for software-in-the-loop testing of visual GNC-loops

The following work is based upon an existing simulation of a quadrocopter and extends the output towards a flight simulator in a way that the generated pictures can be used in a visual navigating routine.

The GNC-loop (Guidance, Navigation & Control) is closed by simple methods, which are able to follow paths defined by global waypoints.

Finally an RRT-algorithm is implemented. With this waypoint generating routine in use the functionality of the simulated closed GNC-loop is shown.



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Day of Submission: 04.04.2012