

Throttle-controlled internal combustion engines as propulsion and control units for high endurance quadrotors: a feasibility study

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OBJECTIVE

Investigation of the suitability of an IC engine to propel and control a multi-rotor.



Throttle command

Measured rpm

Reference rpm

Gain scheduled rpm controller

Engine

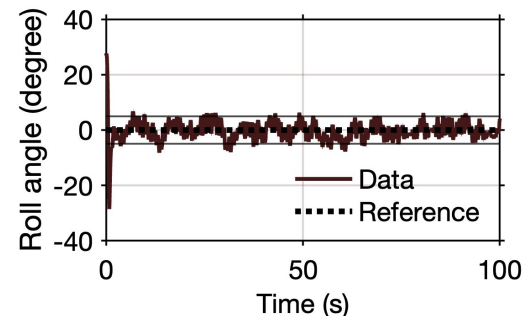
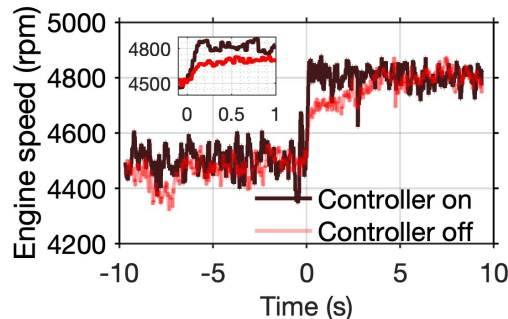
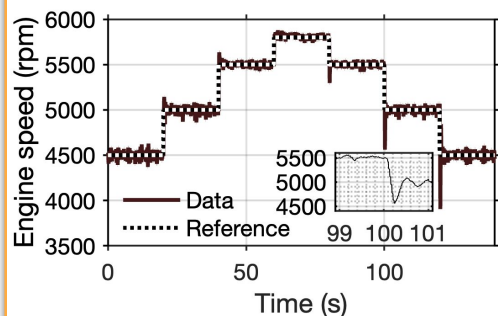
- Speed controller

Biorotor platform

- Attitude controller

Attitude controller (1D)

RESULTS



METHODOLOGY