Technische Universität München   Institute of Flight System Dynamics

Design, Implementation and Evaluation of an Incremental Nonlinear Dynamic Inversion Controller for a Nano-Quadrotor

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Entwurf, Implementierung und Evaluierung eines Inkrementellen Nichtlinearen Dynamischen Inversionsreglers für einen Nano-Quadrotor

Semesterarbeit

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Statutory Declaration

I, Evghenii Volodscoi, declare on oath towards the Institute of Flight System Dynamics of Technische Universität München, that I have prepared the present Semester Thesis independently and with the aid of nothing but the resources listed in the bibliography.

This thesis has neither as-is nor similarly been submitted to any other university.

Garching,

Kurzfassung

Deutsche Kurzfassung der Arbeit.

Abstract

English abstract of the thesis.

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Acronym	Description
ADF	Automatic Direction Finder
ADI	Automatic Direction Indicator

Table of Symbols

Latin Letters

Symbol	Unit	Description
F	N	Force
g	m/s^2	Gravitational acceleration

Greek Letters

Symbol	Unit	Description
α	rad	Angle of attack
ζ	–	Damping of a linear second order system

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Symbol	Unit	Description
m		Variable related to pitch moment
W		Wind

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