

Protokoll

June 3, 2015

Inequality Constraints

$$\left[\begin{array}{c} r_1^2 + r_2^2 - 9 \end{array} \right]$$

Equality Constraints

$$\left[\begin{array}{c} q_1^2 + q_2^2 + q_3^2 + q_4^2 - 1 \end{array} \right]$$

fmincon options

- Algorithm: interior-point
- Display: iter
- GradObj: on
- GradConstr: on
- Hessian: user-supplied
- HessFcn:
- TolCon: $1e-06$
- TolFun: $1e-06$
- TolX: $1e-10$

Gitter und Intervallaenge

- Intervallaenge: 50

Environment

Anfangsbedingung:

Quadrocopter Eigenschaften

- States: 13
- Controls: 4
- Traegheitsmatrix:
- Gesamtmasse: 1.022
- kT: $1.5e-07$

- kQ: $3e - 09$
- d: 0.22
- motor_m: 0.075
- motor_r: 0.015

Ergebnis

- Zeit: 80.0083
- Exitflag: -2
 - 1: First-order optimality measure was less than options TolFun and maximum constraint violation was less than options TolCon
 - 0: Number of iterations exceeded options MaxIter or number of function evaluations exceeded options MaxFunEvals.
 - -2: No feasible point was found.
- Iterations: 31

Beispiel: Norm of Quaternionen

