

Author: Nicolas Hammje

Title: casadi\_free\_variables

Problem Encountered:

.../casadi/core/mx\_function.cpp:409: f::init: Initialization failed since variables [delta\_dot, vx\_dot] are

free. These symbols occur in the output expressions but you forgot to declare these as inputs. Set

option 'allow\_free' to allow free variables.

Solution Implemented:

Our kinematics are formatted in a way that  $x_state_dot = f(x_state_u_control, x_state_dot)$ . The

circular dependency is obvious. To fix this, we control the derivatives of the inputs delta and D, and

you must use the expression for vx\_dot in f\_expl (instead of vx\_dot). Cheers

Report generated on: 2025-01-15 20:57:38