

## LIST OF SYMBOLS

$x_1$	: State input in horizontal dimension
$x_2$	: State input in vertical dimension
$u_1$	: Control input in horizontal dimension ( $v_x$ )
$u_2$	: Control input in vertical dimension ( $v_y$ )
$\mathcal{X}$	: Relaxed unsafe state
$\mathcal{D}$	: Real unsafe state
$\mathcal{D}_{relaxed}$	: Applied unsafe state
$L_f, L_g$	: Lie derivative
$V(x)$	: Control Lyapunov Function
$B(x)$	: Control Barrier Function
$W(x)$	: Control Lyapunov-Barrier Function
$\lambda, \kappa, \varepsilon$	: Parameter metode Control Lyapunov-Barrier Function