

- calls `Target.m` multiple times
- surrounded by tic toc statements
- averages the return times

- calls `sensors.m`
- Determines two suitable $\theta_A + \theta_B$ and passes them to `Bisection.m` which returns θ_0^*
- Passes θ_0^* to `Driver.m`

Top secret

- Reads current conditions & returns them to `Target.m`
- Global info!

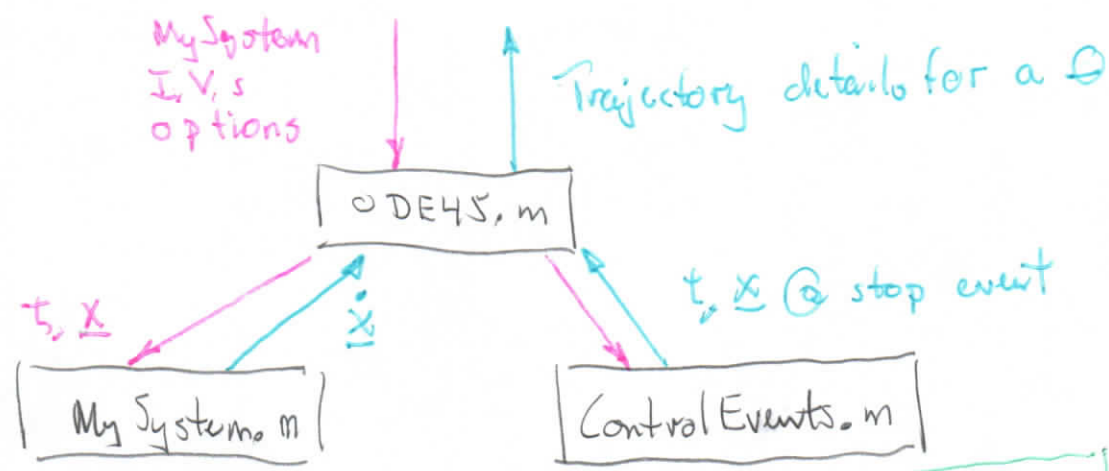
- Normal root finding calc. on function "defined" in `Distance.m`
- set tolerances for Bisection method.

- Given a θ calls `ODE45` to get trajectory details for a given θ .
- Determines if shot is over or under (flag)
- Might plot trajectory (debugging) or just fun.
- Returns `dimin` to `Bisection.m` and over/under info.

Init. values, t interval, options,

t_0
 $x(t), y(t),$
 $N(t), \theta(t)$

trajectory details



- Global sensor data
- Given t, \underline{x} , calc. $\dot{\underline{x}}$ info. for ODE45.m

- Define stop conditions

Top Secret

Specifically calc.

$$\begin{aligned} \dot{x}(t) &= \dots \\ \dot{y}(t) &= \dots \\ \dot{v}(t) &= \dots \\ \dot{\theta}(t) &= \dots \end{aligned}$$

ie

$$\dot{\underline{x}} = \underline{F}(\underline{x}, t)$$

