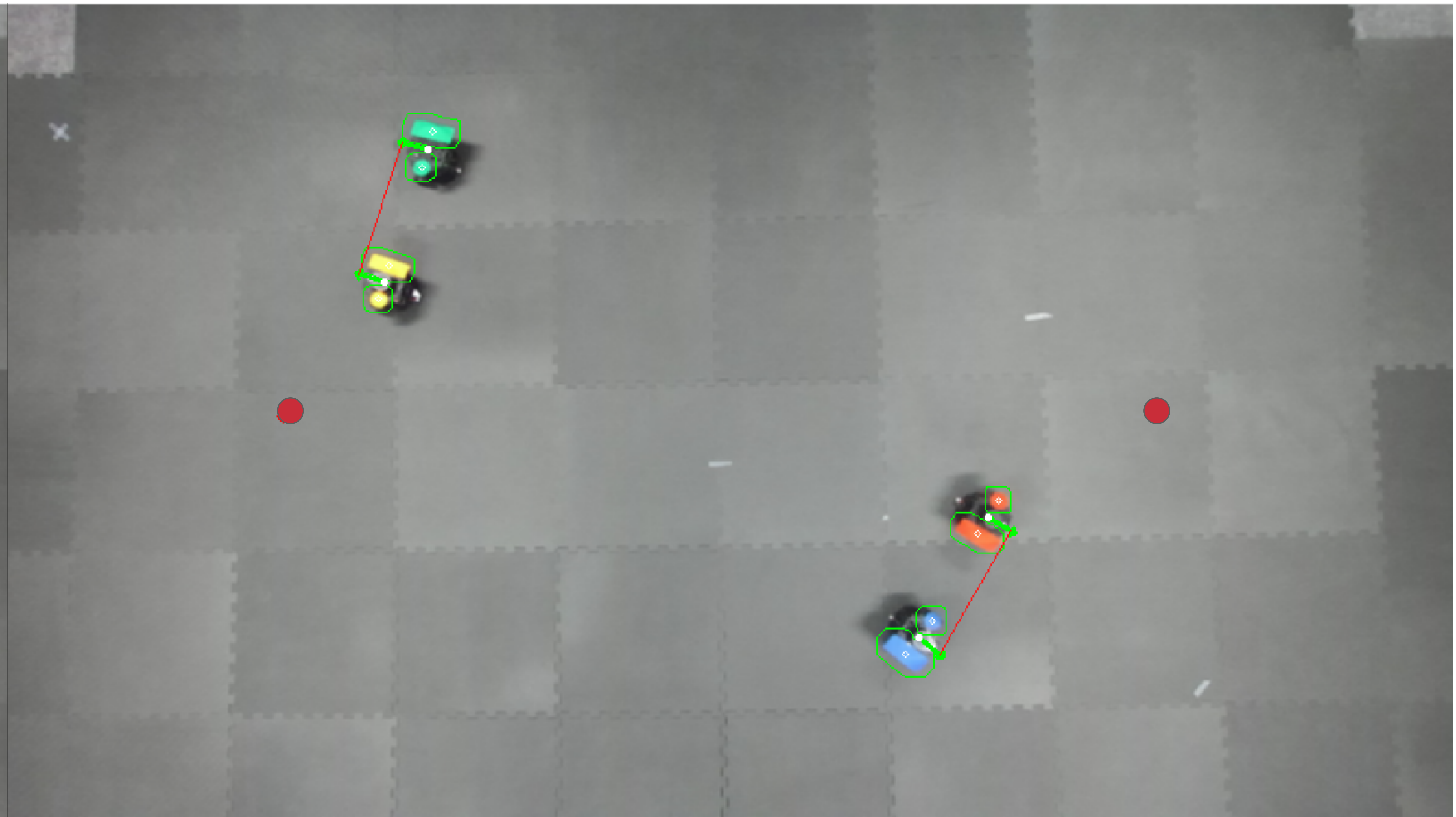


(i) $t = 35\text{s}$



(j) $t = 38\text{ s}$