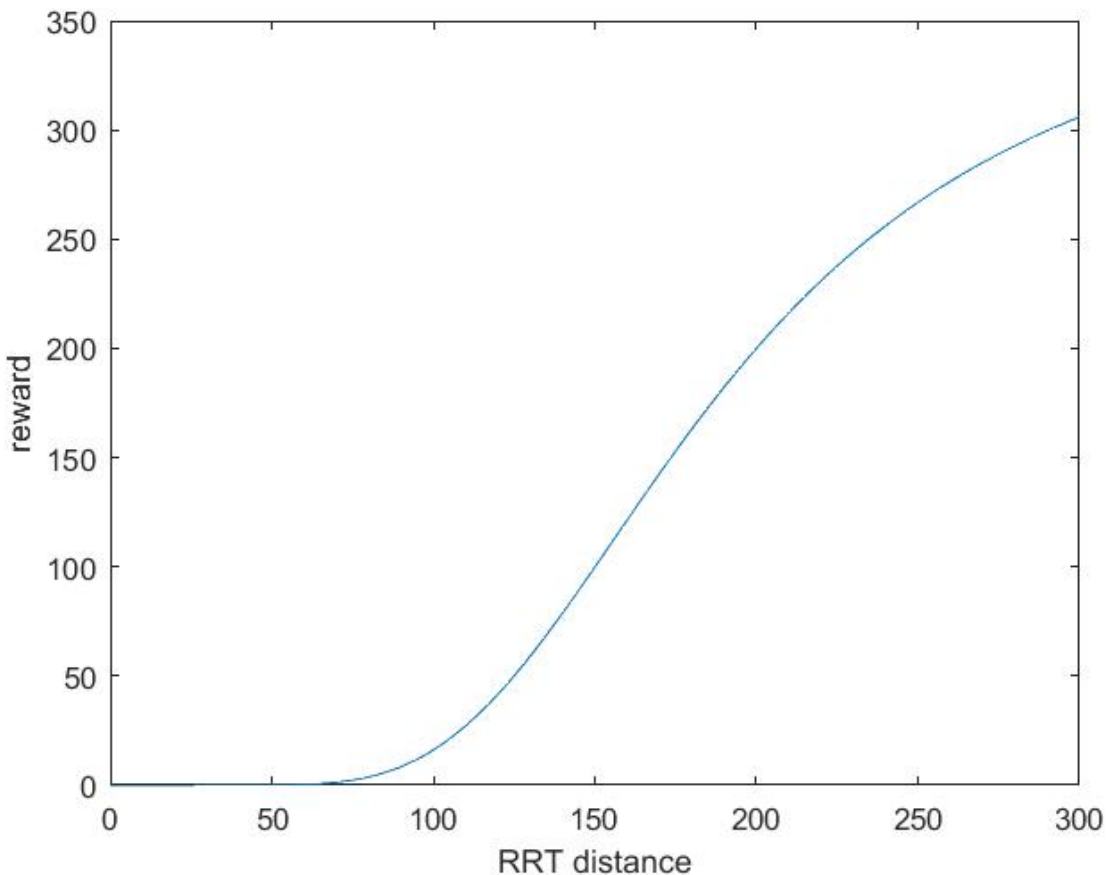


1. Wrote one-page draft for the research
2. Came up with a  $\tanh(x)$  function:  $y = 200 * (1 + \tanh((x - 200) / x^{0.9}))$  for RRT distance metric. That is, moving particles in the region close to the target gets little rewards, moving particles in the mid-range away from the target gets the most rewards, and moving particles far away from the target gets less rewards than that of mid-range particles.



3. Trade-off b/w aggregation and delivery: here aggregation means aggregate particles into large swarms, and delivery means delivering particles to targeted region. I'm trying to get a trade-off b/w this two methods, and then come up with a more efficient algorithm.