PURPOSE

As the systems around us get more complex, many shortcomings of a centralized optimization can be seen vividly. This makes companies spend more money, waste the valuable computing and natural resources. To solve this, we must come up with decentralized, individually smart, and collectively intelligent systems. Such systems are easy to manage, reduce risk of failure, and provide practically feasible solutions. Things that can be done with these decentralized systems are: optimize telecom networks by exploiting decentralized SDN (software defined networks), build medicines that can be released only when and where required, predict housing market variations, etc. We will learn from 150 million years of Swarm intelligence developed by ants and use the ways ants live and find food. It’s called ACO – Ant Colony Optimization. Per the process of developing algorithms or meta-heuristics, a newly made algorithm or meta-heuristic should be tested against a Test Optimization Function. Thus, I will be testing my meta-heuristic algorithm against a Test Optimization Function known as Sphere Function to see if it is truly optimized.