

## **Abstract**

Bat Algorithm (BA) is a new metaheuristic algorithm, invented by Xin She Yang based from bat's echolocation behaviour as an algorithm that developed by combining the advantage of Particle Swarm Optimization (PSO), genetic algorithm and Harmony Search. Bat Algorithm is stated more superior than its predecessor.

In this Final Project, Bat Algorithm is implemented for resolving Continuous Optimization Task. These Tasks usually be used as benchmark function for the performance of metaheuristic algorithm, so BA's performance can be inspected. For performance comparison, BA's result is compared by PSO's result.

Testing finds out that BA can be implemented to Continuous Optimization Task with 100% accurate and BA is 1% better than PSO.

**Keywords:** *bat algorithm, continuous optimization task*