

Abstract

Some activity needs timetabling in order to run as expected and well-ordered. University is one of work that need timetable. University timetabling need some certain rule that influence timetabling.

Telkom University has used Informed GA as it's scheduling metode. But that metode has long time process problem. Because of the problem, we need optimise metode named island model GA that use some island process.

Every island live on a computer. Some amount of connected island do migration each other. At a migration process, island will send the best chromosome then will be processed by another island. With that way, as a purpose to reach heap easier so the process run quicker. On final chromosome inverted fitness value is 520 there are 3% soft constraint class spread violation and have no other violation.

Keyword : Timetabling, Genetic Algorithm, Island Model Genetic Algorithm, Hard Constraint and Soft Constraint