

ABSTRAK

Permainan kartu adalah permainan yang termasuk ke dalam jenis permainan *turn-based strategy*. Permainan dengan jenis *turn-based strategy* ini biasanya memiliki AI dengan tingkat kesulitan yang berbeda-beda sebagai lawan mainnya. Ada banyak algoritma yang dapat diimplementasikan pada AI. Salah satu diantaranya adalah algoritma genetik. Algoritma genetik merupakan salah satu algoritma yang menggunakan teknik pencarian tahap demi tahap berdasarkan seleksi alam untuk mencari solusi. Akhirnya dilakukan analisa, perancangan, desain sistem, dan pencarian teori-teori yang mendukung untuk membuat permainan kartu yang berjenis *turn-based strategy* lalu riset dilanjutkan pada tahap implementasi dan pengujian. Hal ini dilakukan untuk mengimplementasikan algoritma genetik pada AI di permainan kartu dan menghasilkan AI dengan tingkat kesulitan yang berbeda-beda.

Kata Kunci : Algoritma Genetik, *turn-based strategy*

ABSTRACT

Card games are games that fall into the kind of turn-based strategy game. Games with turn-based strategy types are usually have more than one AI difficulty level that can be used as players enemy. There are many algorithms that can be implemented to AI. One of them is the genetic algorithm. Genetic algorithm is one of the search algorithm that uses the level-by-level technique based on natural selection to find a solution. Finally after many analyzes, plans, system designs, and search for theories that support to make the turn-based strategy card games then the research extended at the level of implementation and testing. This is done to implement genetic algorithms on AI in the card game and produce AI with various difficulty level.

Keywords : Algoritma Genetik, turn-based strategy

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