

Group consists of:

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Chosen project:

Project nr 5: Resource allocation.

Description:

Resource allocation scheduling for ORTS. - When to devote time to get more resources. This could be a so called need driven AI. 1.Observe and evaluate the environment 2.Find the most urgent need, based on the environment and the self 3.Perform the need

(<http://home.swipnet.se/dungeondweller/development/dev00055.htm>).

My description:

For this project I intend to create a Need-driven AI for ORTS for controlling the AI reactions to "The big picture" - an AI that reacts to the information (concerning available resources, game state, relative military strength, etc.) it has available through interaction between modules with various goals. This involves determining a system for changing the priorities for each module and how they interact with each other in a way that ensures varied and fluent play.

The computer should be able to react reasonably well to most scenarios, including running out of resources in the immediate vicinity, any composition of enemy troops (anti-units), and maybe even how the opponent behaves (aggressiveness etc.)

If time allows it, I intend to attempt building a basic learning algorithm that allows the AI to improve from game to game. Eventually the AI should then be able to determine whether there is any strategy that will lead to winning in most cases - and then perfect it.