Abstract

In this paper we show how the combination of Behaviour Tree and Utility Based AI architecture can be used to design more realistic bots for Military Simulators. In this work, we have designed a mathematical model of a simulator system which in turn helps in analyzing the results and finding out the various spaces on which our favorable situation might exist, this is done geometrically. In the mathematical model, we have explained the matrix formation and its significance followed up in dynamic programming approach we explained the possible graph formation which will led improvisation of AI, latter we explained the possible geometrical structure of the matrix operations and its impact on a particular decision, we also explained the conditions under which it tend to fail along with a possible solution in future works.

References

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**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**  
Military Simulator  
Behaviour Tree  
Ranking Matrix.