

Case-Based Reasoning for Build Order in Real-Time Strategy Games

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Abstract : We present a case-based reasoning technique for selecting build orders in a real-time strategy game. The case retrieval process generalizes features of the game state and selects cases using domain-specific recall methods, which perform exact matching on a subset of the case features. We demonstrate the performance of the technique by implementing it as a component of the integrated agent framework of McCoy and Mateas. Our results demonstrate that the technique outperforms nearest-neighbor retrieval when imperfect information is enforced in a real-time strategy game.

Keywords : case based reasoning, real time strategy systems, requirements elicitation, requirement analyst, artificial intelligence

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