Call for Papers: Special Issue on Real-Time Strategy Games
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In recent years game AI for real-time strategy (RTS) games has become an active research area. Producing AI players (bots) which are able to consistently beat even average human players (without cheating) in these games has risen as a real challenge. Thus, in RTS games, player satisfaction cannot simply be achieved by “downgrading” the AI, as is possible in many other game genres. In consequence, stronger AI players make the game more interesting.

Recent RTS AI (e.g. StarCraft) tournaments have stimulated the creation of new bots with new concepts and architectures and led to a greatly increased number of publications addressing some of the many open AI problems in RTS games. For example, RTS game aspects such as resource management, scouting, real-time strategic and tactical planning, and others, call for the application of innovative CI/AI methods. This special issue welcomes high-quality work in the area of real-time strategy games. Topics include but are not limited to:

- Adversarial real-time planning in RTS games
- Bot reactiveness: learning and adaptation in RTS bots
- Build order optimization and its relation to strategies and the metagame
- Scouting and uncertainty management in RTS games
- Path-finding and group movement
- Combat simulation and AI for micro-management
- Opponent modeling, especially strategy prediction
- Complexity measurements for RTS games
- Communication and cooperation with and within RTS bots
- New forms of interaction with the player
- AI adaptations for more satisfying play experience
- Difficulty adaptation, ability-based matching, ladders, and tournaments
- Automated level/unit/map design for RTS games
- Multiplayer online battle arena (MOBA) games: the next generation of real-time strategy?

Authors should follow normal T-CIAIG guidelines for their submissions, but clearly identify their papers for this special issue during the submission process. See http://csee.essex.ac.uk/tciaig/authors.html for author information. Extended versions of previously published conference/workshop papers are welcome providing the journal paper is a significant extension of the conference paper, and is accompanied by a covering letter explaining the additional contribution.

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