Call for Papers

Special Issue on Computer Aided Game and Puzzle Design

Special issue editors: Cameron Browne and Antonios Liapis

Numerous approaches now exist for procedurally generating new games and new game content. However, automatically evaluating this new content for quality remains a difficult and open problem, with the metrics for success being highly dependent on the type of game, its intended purpose and audience, personal player preferences, and other factors.

This special issue on Computer Aided Game and Puzzle Design marks a broadening of scope for the ICGA Journal, to reflect the increasingly diverse submissions over recent years covering wider ranges of games and aspects beyond move planning and game analysis. But our focus is still on computer implementations of physical and mathematical games rather than video games, for which computer aided content generation is a burgeoning research field in itself.

The purpose of this special issue is to highlight recent work in the computer aided design of games and puzzles, to give an indication of where the field currently stands and where it is likely to head. It is intended to explore relevant questions such as:

- *How do computer aided designs compare with expert handcrafted designs?*
- *What are the different requirements for automated game and puzzle design?*
- *How can automatically generated content be automatically validated?*

We invite high quality work on any aspect of computer aided game and puzzle design. Topics include but are not limited to:

- Procedural content generation for games and puzzles.
- Metrics for estimating game difficulty, interestingness and quality.
- Automated play-testing.
- Design considerations for player engagement.
- Player modeling and computational models of the psychology of games and play.
- Visualizing the game design space and search methods for sparse design spaces.
- Case studies of computer aided game/puzzle design.
- Functional analyses of the design process.
- Automatically incorporating specific themes, concepts or mechanisms into designs.
- Tutorial modes for teaching new games and puzzles.

Authors should follow standard ICGA journal style and identify their papers for this special issue. Submissions for full articles should be 8 to 12 pages long. Short notes of 3 to 6 pages are also invited.

- **Deadline for submissions:** October 1, 2019

- **Notification of acceptance:** December 1, 2019
- **Final copy due:** February 1, 2020
- **Publication:** Volume 42, Number 1, 2020 (March 2020)