

# Editorial

## IEEE TRANSACTIONS ON GAMES: The First Four Years

**F**OUR years ago, I took over as Editor-in-Chief (EiC) of a new journal called IEEE TRANSACTIONS ON GAMES (ToG). Except it was not really new, it was the new name for IEEE TRANSACTIONS ON COMPUTATIONAL INTELLIGENCE AND AI IN GAMES, which had already been around since 2009. It had been decided that, in order for the journal to grow, we needed a simpler and wider scope. As a side effect, we also got a much more pronounceable name and acronym. I was put in charge of this transition, in the sense that I started my term as EiC just as the name and scope were changing. As I am preparing to leave this position and hand over the reins to Georgios N. Yannakakis, I thought I would like to take a moment to look back at the first four years.

Under its previous title and scope, the journal focused on applications of artificial intelligence (AI) and computational intelligence (CI) to games. (The word computational intelligence in the title comes primarily from the IEEE Computational Intelligence Society being the main sponsor of the journal; you can think of CI as more or less synonymous with nonsymbolic AI.) This turned out to be a somewhat too narrow scope, as the journal never quite got the submission numbers we had hoped for. It was also clear that there were many good papers about games that would have suited the journal but that were not eligible because they did not have an AI component.

The scope for the renamed journal was defined as “scientific, technical, and engineering aspects of games.” This is an admirably concise scope—particularly compared to the previous wording, which had various special cases—but also somewhat abstract. One of my first tasks upon taking over as EiC was therefore to try to interpret and operationalize this scope into guidelines for which papers to send out for review, and in which communities to advertise the renamed journal. On the new website for the journal ([transactions.games](http://transactions.games)), I therefore led with that ToG “welcomes submissions of papers on artificial intelligence for games, games for artificial intelligence, human–computer interaction, graphics, educational and serious games, software engineering in games, affective computing in games, virtual and augmented reality, game design, and other topics.”

The next step was to try to get more and better submissions from some of those fields that had been outside the old scope. I approached this by reaching out to the relevant research communities in various ways, including posting to their email lists, distributing flyers at conferences, directly emailing key members

of the new research communities, and recruiting new associate editors from within their ranks. This went better for some research communities than others. Serious Games is a relative success story, and we now have a steady stream of good-quality serious games papers being submitted. Involvement from the Human–Computer Interaction for Games community has been trickier, probably partly because publishing within that field is strongly dominated by the CHI Play conference.

One of the tools that have worked well for getting more submissions and expanding to new communities is special issues. These are journal issues with a set submission deadline, and managed by a set of guest editors led by a regular associate editor but also including people who do not usually publish in ToG. We have seen successful special issues on topics ranging from Serious Games for Health and The User Experience of AI to Evolutionary Computation for Games.

While the new scope of the journal is generally much broader than the previous scope, in one way it is actually somewhat narrower. I decided to interpret the scope so that every paper must include an application to (or extensive discussion of) some game that a human would conceivably play. This includes almost everything people usually think of as games: card games, board games, video games, role-playing games, party games, etc. But it does not include the kind of minimalist mathematical games that are often used in game theory investigations. Few, if any, actual humans spend their time playing Iterated Prisoner’s Dilemma or the Ultimatum Game.

Speaking of game theory, the presence of the word “games” in the journal’s title has led to a small but steady stream of submissions using game theory as a tool for purposes that have nothing to do with games, such as radio communications or load balancing. These papers were clearly submitted by authors who did not read the scope of the journal or look at the kind of papers it regularly publishes, and have all been desk-rejected with an explanatory note. I sometimes remark that I have nothing against game theory, other than that it inexplicably has the word “game” in it.

Overall, I would say that the drive to increase submission numbers has been somewhat successful. As I am writing this in late November, ToG has received 175 submissions, and there is still December to go. (Could we reach 200? Please?) In 2017, the last year with the old name and scope, 114 papers were submitted. Obviously, these numbers could be better—I do not believe that we have exhausted the market for technical games research journal papers—but improving the numbers further will now be a task for the next EiC.

But beyond submission numbers, the really important measure of the journal's success is the quality and quantity of the papers we actually publish. I am really proud of the papers we have published over the past few years, and I am grateful that so many great researchers have sent their work to our journal for publication.

I would like to close out by thanking the people who have contributed to the journal over the last four years. This includes my editorial assistants, Aditya Bhatt and Debosmita Bhaumik, the associate editors (who find reviewers, coordinate reviews, and make recommendations), the reviewers, and of course the authors. Several hundreds of people, perhaps thousands, have in some way (often invisibly) been involved in making this journal over the past few years. Thank you, you are all important! Is it not beautiful, how a whole community makes an academic journal happen together?

With this, it is time to hand over the torch. I am very much looking forward to seeing how the journal will grow and develop in Georgios' capable hands. I will keep reading new papers from the journal, and I will keep submitting my best work here. I hope you will, too!

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