

# IEEE ITC SIG on Networked Games

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Market forecasts have predicted that the global market for video games will rise to \$118.4 billion by 2022. This growth is driven by factors including advances in graphics hardware and proliferation of mobile devices. The ubiquity of network connections has also driven up the demand for online gaming. Cloud gaming, the newest entry in the online gaming world, has recently emerged as a new service that offers the possibility to play online games using any terminal, such as a tablet, a smartphone, or a TV screen, without the need for expensive high-end 3D graphics rendering and powerful computing hardware and software. With these technological advancements, online gaming hits a huge market of mass consumers. This increasing number of game players desire better playing experiences, straining the underlying network and system architecture, and introducing new research questions that require synthesis of a variety of research areas.

The IEEE ITC SIG on Networked Games was created to gather and disseminate activities conducted in academia and industry across the globe in the area of networked games. The aim is to further understand the challenges and requirements of today's networked games, and to explore the possibilities of future generations of networked games.

Below is a list of major conferences and journals (special issues) focusing specifically on networked games:

- 1- The International Workshop on Network and Systems Support for Games (NetGames) became the flagship yearly forum for researchers and practitioners for presenting and discussing current findings and challenges related to the systems and networking aspects of online games. NetGames has played a major role in forming a solid core networked games community that has been extremely active since 2002. NetGames has been technically supported by IEEE ComSoc (ITC, TCCC, and TCIIN), ACM SIGCOMM and ACM SIGMM.  
- NetGames workshop portal with links to all the workshop editions since 2002: <http://www.netgames-conf.org/>
- 2- Another major closely related forum is the International Workshop on Massively Multiuser Virtual Environments (MMVE). The workshop covers the various facets of massively multiuser virtual environment and provides a forum for active discussions and interactions on the emerging topics of MMVE. Since 2014, MMVE has been co-located with the ACM MMSys conference.  
- MMVE 2016 (with links to previous editions): <http://mocca.uni.lu/mmve2016/>
- 3- International Workshop on Cloud Gaming Systems and Networks (C-Game): C-Game 2014 (<https://sites.google.com/site/icmecgames2014/welcome>) was part of the IEEE International Conference on Multimedia and Expo (ICME 2014).
- 4- IEEE Trans. On Circuits and Systems for Video Technology, Special Section on "Visual Computing in the Cloud – Cloud Gaming and Virtualization", Vol. 25, No. 12, December 2015.
- 5- Springer's Multimedia Systems Journal, Special Issue on "Network and Systems Support for Games", Vol. 20, N° 5, October 2014.
- 6- Springer's Multimedia Systems Journal, Special Issue on "Network and Systems Support for Games", Volume 19, Issue 3, June 2013.

- 7- International Journal of Advanced Media and Communication, Special Issue on "Network and Systems Support for Games", Inderscience, Vol. 4, N° 4, 2010.

Networked games have been also among the topics of interest of a number of forums and events with a broader scope, where papers on networked games regularly appear:

- 1- IEEE Consumer Communications and Networking Conference (IEEE CCNC) regularly organizes technical sessions and tracks that focus on networked games and entertainment applications as part of the main conference.
  - IEEE CCNC 2016 (<http://ccnc2016.ieee-ccnc.org/>) and the upcoming IEEE CCNC 2017 (<http://ccnc2017.ieee-ccnc.org/>).
- 2- International Workshop on Delay-Sensitive Video Computing in the Cloud (DSVCC) focuses on conversational video services on the cloud, including namely video gaming.
  - DSVCC 2015 (<https://sites.google.com/site/dsvcc15/>) was part of the IEEE International Conference on Cloud Computing Technology and Science (IEEE CloudCom 2015).
- 3- ACM Multimedia conference (MM): ACM MM is a flagship multimedia conference that covers all aspects of multimedia research and technologies, including multimedia systems and networks, and in which papers on networked games are regularly published.
  - ACM MM 2016 (<http://www.acmmm.org/2016/>) and the upcoming ACM MM 2017 (<http://www.acmmm.org/2017/>)
- 4- ACM Multimedia Systems (ACM MMSys) is a major forum that focuses on the systems aspects of multimedia systems and applications, and regularly attracts and publishes papers on topics related to networked games.
  - ACM MMSys portal with links to all previous and upcoming editions: <http://www.mmsys.org/>
- 5- IEEE International Conference on Multimedia and Expo (IEEE ICME) is another major multimedia forum for the exchange of the latest advances in multimedia technologies, systems, and applications.
  - IEEE ICME 2016 (<http://www.icme2016.org/>) and IEEE ICME 2015 (<http://www.icme2015.ieee-icme.org/importantdates.php>)
- 6- ACM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV): ACM NOSSDAV is a major forum where research papers on networked games get regularly published. Since 2013, NOSSDAV has been co-located with ACM MMSys.
  - ACM NOSSDAV 2016 (<https://mmsys2016.itec.aau.at/nosssdav-2016/>) and ACM NOSSDAV 2015 (<http://www.mmsys.org/index.php/nosssdav-2015>)
- 8- IEEE Software Journal, Special Issue on "Engineering Fun", Vol. 28, N°5, 2011.
- 7- ACM Transactions on Multimedia Computing, Communications, and Applications (ACM TOMM), Special Issue on "Delay-Sensitive Video Computing in the Cloud" (Upcoming): this special issue focuses on conversational video services in the cloud, including video conferencing, telepresence and tele-learning, collaborative shared environments, and multiplayer video gaming.