This November issue of JBCS contains three papers selected as "the best paper" in three Brazilian conferences organized by special interest groups of the Brazilian Computer Society, and one paper submitted in a regular basis.

The first paper, by Cavalcanti et al, was selected as the best paper in the SBMIDIA99 conference – Brazilian Multimedia Symposium. It concentrates on an important issue – that of management of sound (MIDI) files. Retrieval of multimedia data is based on textual description and indexing of some file characteristics. This involves two complicated issues – selecting features to describe, in order to help retrieval, and creating the adequate index. The paper shows how to work on these two issues, and provides a framework for content-based sound retrieval.

The second paper, by Pistori and Wainer, was selected as the best paper in the ENIA conference – Brazilian Artificial Intelligence Symposium. It describes a system for automatic theory construction, using graph theory as a motivation. The central idea is to construct theories using a given graph set as input. This set is then used to deduct the theories, which are then employed to construct further graphs. It is then up to the user to validate the theories deducted. A novel aspect of this approach resides in the use of distributed computation to form theories from a graph set.

The third paper, by Carlini and Furtado, was selected for the Castilho best paper award in SBBD99 – XIV Brazilian Symposium on Database Systems, from a total of 85 papers submitted. It combines the artificial intelligence concept of intelligent agents to issues in temporal databases. The temporal database stores sequences of events in the real world, describing a narrative, or plot. The agents use this database as a starting point to exploit possible continuations of these plots. This framework was implemented into a system with which users can interact to refine and give feedback to agents, in order to ac progressively construct new plot states (interactive plot generation).

Finally, the paper by Castilho, Rocha, Harder and Thomas has been selected as a regular paper. It presents the use of views in a federated database environment, applied to a hospital information system. This system is being developed for the Brazilian Health System (SUS), and will allow integrating different hospital administration and health care services within a single framework, while preserving the independence of the databases that manage the data of each service. The paper describes the theoretical and practical problems faced, and gives details on the development of this software.