

SBCGames: A dataset of digital games from SBC events

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Abstract. Introduction: *The academic production of digital games in Brazil has grown, especially at SBC events. However, most papers do not make the developed games available, hindering their use and practical evaluation. Objective:* *To present the initial development of the SBCGames dataset, which aims to centralize and make digital games published at SBC events available, allowing researchers to download, test, and evaluate these artifacts. Methodology:* *Five SBC events (SBGAMES, SBIE, WIE, IHC, and WEI) were analyzed between 2021 and 2025. The selection of papers followed inclusion and exclusion criteria. The extracted data include title, year, authors, game status, and download link. Results:* *A total of 195 works were identified, with a predominance of SBGAMES (145). Although 71.8% report complete games, only 28.7% (56 papers) provide a download link. SBCGame is available as a public spreadsheet and contributes to access to game production within the SBC community.*

Keywords *Dataset, Brazilian Repository, Digital Games, SBC.*

1. Introduction

Research and development in digital games have become significantly established in the Brazilian academic scene. Every year, several events promoted by the Brazilian Computer Society (SBC) serve as important venues for the publication of studies reporting the creation of playable prototypes and full games. The requirement of peer review processes at these events ensures the quality and scientific rigor of the research presented.

Despite the large number of works that describe game artifacts, a significant barrier is observed: the preservation and availability of access to these games. Frequently, the literature reports the development of the applications but does not provide the means to access them [Ferreira and Pinheiro 2023]. This creates a practical obstacle, preventing the academic community and other interested parties from being able to experience the proposed tools, limiting the advancement of new studies that depend on the analysis or use of these applications [Rodrigues et al. 2022]. The main objective of this work is to centralize these artifacts on a single platform, allowing researchers to effectively download, play, test, and evaluate the cataloged games.

For the construction of this dataset, this initial work carries out a mapping focused on the last five years (2021 to 2025) of SBC events evaluated with a higher stratum by CAPES. With the consolidation of these data, the aim is to take the first step toward creating an interactive national repository, ensuring the preservation of the production of these games and democratizing access to them to foster future research.

In order to fill this gap, this paper presents the initial development of **SBCGames**, a dataset designed to map and gather digital games developed and published at SBC events.

2. Related Work

Some works in recent literature have addressed the development of repositories and platforms to centralize and facilitate access to educational games, aiming to mitigate the barriers to the practical implementation of these technologies in school and academic environments. The literature presents the creation of several specialized repositories, whether based on curricular alignment, area of knowledge, or target audience.

With a focus on Basic Education and the integration of the school community, GameTED stands out as a collaborative platform that brings together educational games aligned with the National Common Curricular Base [Costa et al. 2024]. GameTED acts as an ecosystem that integrates game developers, teachers, and students, allowing producers to publish their games and receive direct feedback from users, while teachers can create virtual activity rooms and use manuals and teaching plans to guide classroom application.

In the context of higher and technical education, the EduGames platform proposes to centralize educational digital games aimed at teaching programming logic, data structures, and other technological disciplines focused on computer science education [Nogueira and Furtado 2025]. Given the scarcity of specific materials with pedagogical foundation for this area, EduGames organizes titles based on specific knowledge (such as syntax, debugging, functions), platforms, categories, and languages.

On the other hand, when it comes to accessibility and inclusive education, we have REPAssistive [Lima et al. 2019]. It is a repository designed to catalog digital educational resources and specific games for students with specific educational needs, focusing on language and logical reasoning. REPAssistive seeks to promote equity through usability innovations, such as a voice recognition search engine and an interface widely evaluated and approved by students with intellectual disabilities and design experts.

Finally, in relation to the mentioned works, this work differs by proposing a generalized approach, grouping all types of digital games regardless of their application domains. Thus, while current initiatives fragment access into specific niches, this work fills a gap in the literature by offering a unified and up-to-date repository.

3. Methodology

For the construction of this dataset, a methodology based on the guidelines proposed by Keele et al. (2007) was adopted: (i) planning; (ii) execution; (iii) dissemination of results. These steps are described below and can be observed in Figure 1.

3.1. Planning

In order to identify the digital games available at events of the Brazilian Computer Society (SBC), five events that include tracks focused on game development were initially selected. Thus, priority was given to events classified with a higher stratum according to CAPES, ensuring the relevance of the works. The five events selected for this first stage were: SBGAMES, SBIE, WIE, IHC, and WEI.



Figure 1. Methodology adopted in the work.

Thus, criteria were defined for the selection of works that could effectively report the development of a digital game. The only **inclusion criteria** adopted was:

- **IC1:** Studies that report digital games or playable prototypes developed and published at SBC events.

Studies that met at least one **exclusion criteria** were removed from the final analysis. These criteria are:

- **EC1:** Studies that report improvements to games (such as design and art).
- **EC2:** Studies that report analog board games.
- **EC3:** Studies that fall under systematic reviews and mappings.
- **EC4:** Publications that consist of work in progress.

The choice of IC1 is justified by ensuring that the selected studies present concrete artifacts, aiming to guarantee that the articles have undergone a peer-review process prior to publication, which contributes to the overall quality of the sample. Regarding the exclusion criteria, EC1 is based on the understanding that games incorporating improvements correspond to previously developed artifacts, rather than merely refined ones. EC2 is justified by the delimitation of the research scope to the domain of digital games. EC3 is adopted with the purpose of avoiding the inclusion of secondary or tertiary studies. Finally, EC4 was adopted since short papers, extended abstracts, or posters often do not provide sufficient information for a robust analysis.

3.2. Execution

The selection of studies was initially conducted between January and March 2026 and was divided into two steps. This initial analysis was carried out manually, ensuring rigor in the selection of the works. Regarding the timeliness of the studies, the analysis focused on the proceedings of events from the last five years (the period from 2021 to 2025).

Step 1: Initially, the title, abstract, and conclusion of each paper were reviewed. This step made it possible to verify whether the study effectively addressed the

development of a digital game. Based on this information, the established inclusion and exclusion criteria were applied.

Step 2: In this step, the papers were read and the data considered relevant for the construction of the dataset were extracted. The extracted data included: article title; year of publication; game name; authors; main author's institution; keywords; publication track; genre/category; game domain; game status (prototype or complete); and download link. These data were organized according to each of the analyzed events.

3.3. Data Dissemination

As this is a work in progress, the data obtained in this primary assessment were entered into a spreadsheet for analysis. This spreadsheet is available at the following link: <https://docs.google.com/spreadsheets/d/1N8ibrYAqFQQFQOEijrkmkjyBHQsGPHLnkuzsFcDaMwk>.

4. Partial Results

The results obtained so far indicate a total of 195 papers, with a strong predominance of publications at SBGAMES (N=145), followed by SBIE (N=33), WEI (N=6), WIE (N=6), and IHC (N=5). These findings are presented in Table 1.

Table 1. Number of articles identified in the events.

SBGAMES	SBIE	WIE	WEI	IHC	TOTAL
145	33	6	6	5	195

Regarding the universities with the highest number of published papers, the State University of Amazonas (UEA) ranks first, with 14 papers. In second and third positions is the Federal University of Viçosa (UFV) and Federal Technological University of Paraná (UTFPR), with 13 papers each. In fourth and fifth positions are the Federal University of Pará (UFPA) and the Federal Institute of Bahia (IFBA), with 8 papers each. Finally, in sixth place are the and the State University of Maringá (UEM), with 7 papers each.

The analysis of game genres shows that Puzzle (N=30) is the most developed genre, followed by RPG (N=25) and Adventure (N=23), indicating a large number of games focused on problem-solving, narrative, and exploration. Next are Action games (N=15). Other relevant genres include Visual Novel (10), Applied Game and Quiz (9 each), as well as Platform and Strategy. Among the analyzed games, 15 studies did not define the developed genre. Overall, the results suggest a concentration on accessible genres that are frequently used in educational contexts, while also revealing a certain level of creative diversity among the other identified genres.

With regard to the status of each work, it is observed that 71.8% (N=140) of the identified works report the development of a complete game. On the other hand, the number of prototypes corresponds to 28.2% (N=55).

One of the most relevant information for the construction of this dataset concerns the availability of the game for download. Among the analyzed papers, only 56 works provide a link to a game download repository, which represents only 28.7% of the total. Table 2 presents the number of available works by event.

Table 2. Number of games available for download per event.

Year	SBGAMES	SBIE	WIE	IHC	WEI
2025	8	1	1	0	0
2024	8	6	0	0	0
2023	9	3	2	1	1
2022	8	3	0	0	1
2021	4	0	0	0	0
TOTAL	37	13	3	1	2

5. Conclusion and Next Steps

This *short paper* presented the initial development of SBCGames, a dataset focused on gathering digital games developed and published at events of the Brazilian Computer Society over the past years. The main objective of this initiative is to centralize these artifacts on a single platform, allowing researchers to easily download, play, test, and evaluate the community's digital games.

Through a review covering the last five years of five SBC events (SBGAMES, SBIE, WIE, IHC, and WEI), 195 relevant papers were identified. The analysis of these partial results revealed a finding that reinforces the need for this repository: although the vast majority of works (71.8%) report the development of a complete game, only 28.7% (56 papers) actually provide a link for the game's download.

As next steps for consolidating the research, it is planned to expand the data extraction to other higher-tier events evaluated by CAPES (such as SBES, SIBGRAPI, and SVR) and national journals in the field (such as RBIE and RENOTE). In addition to contacting the main authors to make their games available. Finally, the project will result in the development of an interactive dashboard, which will function as a unified platform for visualization, access, and download of the SBCGames dataset, ensuring the preservation of and access to these artifacts for the scientific community.

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