

2021/22 ANNUAL REPORT BRAZILIAN COMPUTER SOCIETY (SBC)



An Overview of SBC

Founded in 1978, SBC played a relevant role in establishing computing as a science and profession in Brazil and Latin America. It is represented in several government institutions and maintains a strong influence in adopted curricula for computing careers in Brazil. The society is organized over twenty-seven special commissions covering computer science and ICT fields, with related technical conferences. SBC maintains an open digital library, OpenLib (SOL), whose main objective is to enable access to specialized information in computing science. The collection consists of event proceedings, journals with national and international visibility, and books. SBC has twenty-five regional chapters located in all the states of Brazil: four in the Central-West region, 4 in the North region, 9 in the Northeast region, 3 in the South region, and 5 in the Southeast region. Only in a few states in the northern region, SBC does not have one chapter per state due to the smaller number of associates in this region and the only state that has two chapters is São Paulo. In these twenty-five regional chapters, there are 165 institutional representations from education and research institutions.

SBC's Vision / Mission Statement

SBC is a non-profit scientific society whose individual members are students, professors, professionals, researchers, and computing and ICT enthusiasts from all over Brazil. SBC aims to promote access to information and culture through information and communication technologies, promoting digital inclusion, encouraging research and teaching on computing in Brazil, and contributing to the education of professionals with social responsibility.

Key Activities in the Reported Period

This document reports SBC's activities from August 2021 to July 2022. In this period, we had relevant advances following our planning. However, our main challenge was to keep our community active and productive, despite restrictions due to COVID-19 and science and technology funding reductions.

As in the previous two years, we continued with regular remote meetings with the board, council, and SBC staff. In mid-2022, with the improvement of sanitary conditions, we had a face-to-face meeting at the administrative headquarters, in Porto Alegre, with part of the board and council.

We had another year of intense activities. Several new working groups (WGs) were created to address the challenges identified in the period, such as adjustments to our event and journal management system (JEMS) and curriculum guidelines for the new B.Sc. courses approved by the Brazilian Ministry of Education: artificial

intelligence, cybersecurity, and data science.

In this period, we celebrated the final approval of the annex to the Brazilian National Common Core Curriculum (BNCC) due to the key role played by SBC in the National Education Council (CNE). In addition, we reactivated our ethics committee and created a special task force to propose ways to use computer technologies to deal with climate change, which resulted in a manifesto approved by the SBC general assembly.

We can mention other achievements, such as an online welcome event for new Brazilian computing B.Sc. students, the signing of a cooperation agreement with the Brazilian Association of Black Researchers (ABPN), the organization of the Brazilian Informatics Olympiad (OBI) with the participation of nearly 60,000 students, a new general sponsorship plan for SBC events, the publication of new issues of *Computação Brasil* magazine with emerging topics - such as regulation and ethics in AI and Open Science - among other achievements detailed in the complete SBC annual report.

Whenever demanded, we made public our understanding in favour of the national public interest, as in our declaration reaffirming our confidence in the Brazilian electronic voting system.

After two online SBC annual congresses, we finally returned to a face-to-face SBC annual congress in 2022, in the city of Niterói, with all the security protocols to protect our community against COVID-19. As in previous years, the theme of the 2022 congress is of great public interest: "Digital Empowerment: The Role of Computing in Building an Inclusive and Democratic Society". In a world so dependent on digital technologies, the absence of communication infrastructure, computing resources, and knowledge to fully use the services and resources of the digital universe makes social inequality in our country even more unfair.

As a scientific society, we will persist in developing computing in our country, aiming at a more fair and inclusive society.

Brazilian Participation in IFIP

General Assembly

- Country Representative: Raimundo José de Araújo Macêdo

Member Society Assembly

- Country Representative Member: Raimundo José de Araújo Macêdo

Technical Committees (TC) and Working Groups (WG)

TC 1 - Foundations of Computer Science

- TC1 Brazilian member: Leila Ribeiro
- Chair of WG 1.5: Pedro Paulo Balbi
- WG 1.3: Leila Ribeiro

TC 2 – Software: Theory and Practice

- TC2 Brazilian member: Julio Leite
- WG 2.6: Sylvio Barbon
- WG 2.7: Simone Diniz Junqueira Barbosa
- WG 2.9: Julio Caesar S. Leite
- WG 2.13: Fábio Kon
- WG 2.16: Roberto Ierusalimsky

TC 3 - Education

- TC3 Brazilian member: Ig Ibert Bittencourt

TC 5 - Information Technology Applications

- Vice-Chair of WG 5.5: Ricardo J. Rabelo
- WG 5.1: Eduardo de Senzi Zancul
- WG 5.4: Marco Aurélio de Carvalho

- WG 5.7: Joao Mendes Dos Reis, Irenilza de Alencar Nääs and Ricardo José Rabelo
- WG 5.8: João Paulo Almeida

TC 6 - Communication Systems

- TC6 Brazilian member: José Neuman de Sousa
- WG 6.2: José Neuman de Souza
- WG 6.3: Luis Felipe M. de Moraes and Edmundo de Souza e Silva
- WG 6.6: José Neuman de Souza, José Marcos S. Nogueira and Carlos Becker Westphall
- WG 6.8: Claudia Barenco Abbas
- WG 6.9: José Neumann de Souza
- WG 6.11: Americo N. Amorim and Manuel J. Mendes

TC 7 - System Modeling and Optimization

- TC7 Brazilian member: Edmundo de Souza e Silva
- WG 7.3: Virgilio Almeida and Edmundo de Souza e Silva
- WG 7.4: Antônio Leitão

TC 8 - Information Systems

- WG 8.1: Jaelson Castro and Giancarlo Guizzardi
- WG 8.2: Eduardo Morgado
- WG 8.3: Andreia Carneiro T. D. Pereira and Alecsandra Alves V. Ventura
- WG 8.5: Renata Araujo, Luiz Antonio Joia, Beatriz Lanza, Gabriel Marcuzzo, and Nicolau Reinhard
- WG 8.9: Rogerio Atem de Carvalho

TC 9 - ICT and Society

- WG 9.4: Luiz Antonio Joia and Renata Lèbre La Rovere

TC 10 - Computer Systems Technology

- TC10 Brazilian member: Ricardo Augusto da Luz Reis
- WG 10.2: Luigi Carro Marco, Götz Marcio Kreutz, Carlos E. Pereira and Flávio R. Wagner
- WG 10.3: Siang Wun Song
- WG 10.4: Eliane Martins
- WG 10.5: Flávio Rech Wagner and Ricardo Reis

TC 11 - Security and Privacy Protection in Information Processing Systems

- WG 11.8: Ricardo Dahab and Roberto Gallo

TC 12 - Artificial Intelligence

- TC12 Brazilian member: André C. P. de L. de Carvalho
- Vice-Chair of Working Group 12.3: Jaime Simão Sichman
- WG 12.3: Rafael Bordini

TC 13 - Human-Computer Interaction

- TC13 Brazilian member: Lara S. G. Piccolo
- Vice-chair of TC 13: Simone D. Junqueira Barbosa
- WG 13.3: André Freire
- WG 13.4: Simone Diniz Junqueira Barbosa
- WG 13.7: Simone Diniz Junqueira Barbosa

TC 14 - Entertainment Computing

- Chair of Working Group 14.10: Rodrigo Schramm
- WG 14.3: Suely Fragoso
- WG 14.10: Marcelo Johann

Events

In the reported period, 37 events of different sizes and formats were held, including symposia, conferences, and regional chapter events with tutorials, workshops, and short courses. All events were organized in an online format only.

Besides specialized technical events, SBC annually promotes the Congress of the Brazilian Computer Society (CSBC) to discuss emergent societal and multidisciplinary issues, which is the most traditional and the largest scientific event in the area of Computer Science in Brazil. Since its inaugural edition in 1980, CSBC has gathered annually over 1,000 academics, researchers, students, and professionals from Brazil and abroad to

present and discuss the latest scientific, technological, educational, and political developments in the area of Computer Science and ICT.

Technical Symposia and Conferences - Promoted Events

- XXXIX Simpósio Brasileiro de Redes de Computadores e Sistemas Distribuídos (SBRC 2021)
- XII Congresso Brasileiro de Software: Teoria e Prática (CBSOFT 2021)
- XXI Simpósio Brasileiro em Segurança da Informação e de Sistemas Computacionais (SBSEG 2021)
- XXXVI Simpósio Brasileiro de Banco de Dados (SBBDD 2021)
- 18th Latin American Robotics Symposium, 13th Brazilian Symposium of Robotics and Workshop of Robotics in Education (LARS/SBR/WRE 2021)
- XX Simpósio Brasileiro sobre Fatores Humanos em Sistemas Computacionais (IHC 2021)
- XXXIV SIBGRAPI | XX SBgames | XXIII SVR 2021
- XVIII Simpósio Brasileiro de Computação Musical (SBCM 2021)
- XXVII Simpósio Brasileiro de Sistemas Multimídia e Web (WebMedia 2021)



Opening of CSBC 2022, with SBC President, professor Raimundo Macêdo, authorities, and organization chairs, professor Flavia Cristina Bernardini, above on the screen, and professor José Viterbo Filho.

- XX Simpósio Brasileiro de Qualidade de Software (SBQS 2021)
- X Latin-American Symposium on Dependable Computing (LADC 2021)
- XI Simpósio Brasileiro de Engenharia de Sistemas Computacionais (SBESC 2021)
- X Congresso Brasileiro de Informática na Educação (CBIE 2021)
- Brazilian Symposium on Bioinformatics (BSB 2021)
- X Brazilian Conference on Intelligent Systems (BRACIS 2021)
- XXIV Brazilian Symposium on Formal Methods (SBMF 2021)
- Final Maratona SBC de Programação 2021
- Escola de Verão da Maratona de Programação 2022
- Simpósio Brasileiro de Sistemas Colaborativos (SBSC 2022)
- II Simpósio Brasileiro de Educação em Computação (EduComp 2022)
- XVIII Simpósio Brasileiro de Sistemas de Informação (SBSI 2022)
- XL Simpósio Brasileiro de Redes de Computadores e Sistemas Distribuídos (SBRC 2022)
- IX Maratona Mineira de Programação (MMP 2022)
- XXII Simpósio Brasileiro de Computação Aplicada à Saúde (SBCAS 2022)
- XLII Congresso da Sociedade Brasileira de Computação (CSBC 2022)

Regional Chapters Events

- VIII Escola Regional de Computação Aplicada à Saúde de São Paulo (ERCAS-SP 2021)
- VII Escola Regional de Sistemas de Informação do Rio de Janeiro (ERSI-RJ 2021)
- XVI Escola Regional de Banco de Dados (ERBD 2021)
- IX Escola Regional de Computação Ceará, Maranhão, Piauí (ERCEMAPI 2021)
- IX Escola Regional de Informática de Goiás (ERI-GO 2021)
- XXI Escola Regional de Computação Bahia - Alagoas - Sergipe (ERBASE 2021)
- XIX Escola Regional de Redes de Computadores (ERRC 2021)
- XI Escola Regional de Informática de Mato Grosso (ERI-MT 2021)
- IV Escola Regional de Alto Desempenho da Região Centro-Oeste (ERAD-CO 2021)
- I Escola Regional de Alto Desempenho e I Escola Regional de Aprendizado de Máquina e Inteligência Artificial da Região Norte 2 (I ERAD|ERAMIA-Norte2 2021)
- IV Escola Regional de Informática do Rio de Janeiro (ERI-RJ 2021)
- VII Escola Regional de Alto Desempenho do Rio de Janeiro (ERAD-RJ 2021)
- V Escola Regional de Engenharia de Software (ERES 2021)
- XIII Escola Regional de Alto Desempenho de São Paulo (ERAD-SP 2022)
- XXII Escola Regional de Alto Desempenho da Região Sul (ERAD/RS 2022)
- II Escola Regional de Computação do Rio Grande do Sul (ERCompRS 2022)
- XVII Escola Regional de Banco de Dados (ERBD 2022)

Co-promoted Events

- Chip in the Fields 2021
- 33rd International Symposium on Computer Architectures and High Performance Computing|XXII Simpósio em Sistemas Computacionais de Alto Desempenho (SBAC-PAD|WSCAD 2021)

Partner Events

- 15^o International Conference on the Computational Processing of Portuguese Language

Supported Events

- III Jornada de Tecnologia da Informação da UFRA
- VI Congresso sobre Tecnologias na Educação (Ctrl+E 2021)
- VII Jornadas Ibero-americanas de Interação Humano-Computador (HCI 2021)
- IX Symposium on Knowledge Discovery, Mining and Learning (KDMiLe 2021)
- XVI Conferência Latino-americana de Tecnologias de Aprendizagem (LACLO 2021)
- II SertãoComp
- XXIII Congresso de Computação e Tecnologias da Informação (ENCOINFO 2021)
- XIII Congresso Brasileiro de Agroinformática (SBIAGRO 2021)
- VI Workshop Escola de Informática Teórica (WEIT 2021)
- 12^o Encontro Anual de Tecnologia da Informação (EATI 2021)
- XVI Encontro Anual de Computação (EnAComp 2021)
- XIV Encontro Unificado de Computação do Piauí (ENUCOMPI 2021) e XI Simpósio de Sistemas de Informação (SINFO 2021)
- XVII Workshop Anual do MPS (WAMPS 2021)
- XIII Computer on the Beach 2022
- INCITEL 2022
- WAER - 4th Workshop on Accessibility in Educational Resources
- Roadsec 2022 - The major festival of hacker culture in Latin America

More information about the Brazilian Computer Society (SBC):

- Web Site: <https://www.sbc.org.br/>
- Annual Reports (English/Portuguese): <https://sol.sbc.org.br/livros/index.php/sbc/catalog/series/rels>
- Open Digital Library: <https://sol.sbc.org>.