Message from the Program Chairs

SIBGRAPI 2023

Welcome to the 36th edition of the Conference on Graphics, Patterns, and Images (SIBGRAPI 2023). SIBGRAPI is an international event annually promoted by the Brazilian Computer Society (SBC) through its Interest Group on Computer Graphics and Image Processing (CEGRAPI), this year also with co-promotion of IEEE South Brazil RAS Chapter. The event proceedings are published by the IEEE Computer Society Press and have been available at IEEE Xplore since 1997. In addition, a small number of SIBGRAPI 2023 featured papers have been published as a Special Section of Elsevier's Computers & Graphics Journal and as a Special Stream of the IEEE Geoscience and Remote Sensing Letters (IEEE GRSL). These journal stream papers were selected before the conference via a special call for papers. In 2023, SIBGRAPI was held in an in-person format in the beautiful city of Rio Grande, Rio Grande do Sul, in southern Brazil. SIBGRAPI 2023 provided a unique opportunity for participants worldwide to safely attend its technical sessions, tutorials, workshops, and keynote speakers presentations.

This year, SIBGRAPI featured an excellent technical program including 42 full papers plus four tutorial papers that are now published in this volume, which is available in the IEEE Xplore digital library, totaling 46 high-level publications. Each submission was reviewed by at least three members of the Program Committee to ensure high-quality standards. The papers published in the conference proceedings underwent an one-stage double-blind review process, while the articles published in the Computers & Graphics Journal and IEEE GRSL underwent two cycles of double-blind reviewing. The 42 papers of the main track were presented orally at the conference, and grouped into thematic sessions. Four distinguished keynote speakers enhanced the SIBGRAPI 2023 program. Qi Sun (New York University) introduced the opening talk entitled "Toward Human-Centered XR: Bridging Cognition and Computation". Rogerio Feris (MIT-IBM Watson AI lab) presented "Learning with Real and Unreal Data in the Era of Foundation Models", and Kyle Gustafson (ONR Global) presented "The role of the US Office of Naval Research Global in the promotion of basic science", while João Paulo Papa from the Universidade Estadual Paulista (UNESP) discussed"Perspectives on Quantum Machine Learning".

In addition, SIBGRAPI 2023 also hosted the following workshops: Workshop of Theses and Dissertations (WTD), Workshop of Industry Applications (WIA), Workshop of Undergraduate Works (WUW), Workshop of Works in Progress (WiP). And also hosted four tutorials: Tutorial 1 - "Crafting Realistic Virtual Humans: Unveiling Perspectives on Human Perception, Crowds, and Embodied Conversational Agents", Tutorial 2 - "Superpixel segmentation: from theory to applications", Tutorial 3 - "How to train your (neural) dragon", Tutorial 4 - "High-level Grammars for Visualization and Visual Analytics".

Finally, SIBGRAPI 2023 devoted a tribute to two distinguished researchers in the field that greatly contributed to the community: Nelson Mascarenhas (In Memoriam) and Leonardo Pini Magalhães (UNICAMP).

Rio Grande, RS, Brazil, November 6th - 9th, 2023.

Esteban Walter Gonzalez Clua, UFF, Brazil
Thales Sehn Körting, INPE, Brazil
Fernando Vieira Paulovich, EUT, Netherlands
Rogerio Feris, IBM Research, USA

Program Chairs