Editor's Note

Technology is quickly becoming accessible for everybody, everywhere. High quality and low price devices equipped with high definition and multitouch displays, accelerometers, gyroscopes, voice recognition, GPS, and so on are now part of our day-to-day lives. At the same time, the amount of data we need to deal with is growing exponentially. Our personal data are migrating to the cloud and the need for permanent access to a digital live is becoming urgent.

In this *new world*, everybody is invited to process non-conventional data, often presented through non-conventional devices. In other words, it is not an exaggeration to say that what we used to refer as *virtual reality* is becoming as present as never before in our lives. In this context, the "mouse and keyboard" human-computer interaction is not enough anymore. Even if it remains the best interaction solution in many scenarios, new interaction techniques, devices, metaphors, and systems are coming up all the time and many others are still desperately needed.

I am delighted to introduce the SBC Journal on 3D Interactive System (JIS), a new on-line and open access scientific journal published by the Brazilian Computer Society (SBC) and maintained and supported by the interest group on Virtual Reality (CERV). The purpose of this new publication venue is to offer a space for scientific contributions and discussion on this field. Its main goals include: to disseminate original scientific work in the areas of virtual reality, augmented reality, and 3D interaction; to present and introduce interesting scientific work being currently carried out by institutions focused on research and development in related themes; and to offer a space for the exchange of specialist opinions about the main challenges in the area.

Papers will be published as soon as they have cleared the review process, and short turnaround is expected. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. Therefore, there is no restriction on the length of the papers or the use of color figures.

The first research paper of JIS was written by João Paulo Lima, Francisco Simões, Lucas Figueiredo, and Judith Kelner, from one of the most important and active research groups on virtual reality in Brazil, the one from the Federal University of Pernambuco (UFPE). In this paper, the authors presented their experience on implementing three markerless 3D tracking techniques for augmented reality. The paper surveys and presents a taxonomy of existing markerless tracking techniques for AR, presents the Edge-ID algorithm, a novel method for visible edge detection, and evaluates and compares all techniques implemented under different configurations. The results obtained can be used as a reference by researchers and practitioners in augmented reality.

The Editorial Board is committed to making this online journal a success, and we look forward to receiving your contributions.

Luciana Nedel
Editor-in-Chief

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