Editorial Convidado

This special issue of RITA contains the papers of the Tutorials presented at the Brazilian Symposium on Computer Graphics and Image Processing, SIBGRAPI 2007. It was a pleasure to receive 17 submissions, two of them from foreign countries. The majority of them have a very high standard but, because of time and space constraints, only six of them could be accepted. Herein texts associated to five of them are presented. These papers address a number of current research issues as well as conceptual information seek by the students and researchers of the field, as summarized as follows.

Thomas Lewiner in the first paper provides a thorough explanation about 3D compression, and properly gives the step stones to introduce one to the field.

Bruno Rabello, Edson Mattos, Bruno Evangelista and Esteban Clua, present in the second paper an introduction to XNA, a new platform to develop games in real time. XNA is the first API unified to personal computers and game consoles. Examples of building games (Sokoban 3D) are provided, as well as the XNA classes.

The third paper, by Anderson Rocha and Siome Goldenstein, presents the concepts and algorithms regarding Steganography and Digital Steganalysis, which differently from Cryptography, conceals the information distributed between recipients, making the process of coding/decoding more transparent and hidden to the users of the data.

Andre Suslik Spritzer and Carla M. D. S. Freitas, in the fourth paper, present a timely discussion about graph visualizations. Graphs are seen as powerful data structures to represent information of many fields, ranging from software engineering, databases and artificial intelligence to medical science, biology, chemistry and many others. The authors present the concepts and tools for 2D and 3D visualization and browsing of large graphs, and also discuss the interaction issues involved.

Gilson A. Giraldi, Paulo S. Rodrigues, Edson C. Kitani, Carlos E. Thomaz, in the fifth paper, detail the issue of pattern recognition and classification from the statistical point of view. That is, as a problem of function estimation from empirical data. They present and discuss three techniques: Support Vector Machine (SVM), Perceptron and Linear Discriminant Analysis (LDA), and give experimental results on two case studies: face images analysis and breast cancer classification.

The success of the SIBGRAPI 2007 Tutorials owes a great deal to the hard work of many. We sincerely thank and acknowledge the reviewers contribution. We thank the authors for submitting quality research material and providing final paper versions on schedule. Finally, our gratitude goes to the organizers of SIBGRAPI 2007 for providing an insightful forum for discussions and enrichment of the Computer Graphics and Image Processing field.

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