Guest Editorial

The Journal of Computing and Information Technology is pleased to devote a complete issue to a selection of papers presented at the Third Slovenian-German and the Second Workshop of Slovenian Society for Pattern Recognition (SDRV) held in Ljubljana from April 24–26, 1996.

The workshop, devoted to Speech and Image Understanding, was organised by the cooperating research groups from Universities of Erlangen–Nürenberg and Ljubljana, and supported by the International Association for Pattern Recognition (IAPR), the Alexander von Humboldt Foundation (AvH) and the Institute of Electrical and Electronic Engineers (IEEE)–Slovenia Section.

Participants from Austria, Bulgaria, Czech Republic, Croatia, Germany, France, Italy, Slovakia, Slovenia, Switzerland, and United Kingdom contributed with 37 papers. According to my aim of giving a survey of the topics treated on the workshop the following papers have been selected:

Nöth, Harbeck, Niemann, Warnke and Ipšić present two concepts for language identification in the context of multilingual automatic speech understanding.

Denzler and Niemann describe a new approach to contour extraction and tracking based on the principles of active contour models and show the suitability of this approach for real-time object tracking.

Leonardis and Bischof propose an approach to solve the basic limitations of the current appearance-based matching methods using eigenimages: non-robust estimation of coefficients and inability to cope with problems related to occlusions and segmentation.

Pepelnjak, Mihelič and Pavešić describe the semantic analysis of the automatically recognised word hypothesis lattice of Slovenian continuous speech.

Burger, Burge and Mayr address the problem of generic object recognition and learning using weak structural representations and extend the Bischof and Caelli method by utilising polymorphic types of primitive parts and introducing a new approach to creating parts paths that incorporates non-neighbouring components.

Kalafatić and Ribarić describe the module for automated generation of object description in a computer vision system using Petri nets as a knowledge representation scheme.

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