Workshop on Parallel and Distributed Computing in Image Processing, Video Processing, and Multimedia (PDIVM'2001)

In the recent years, computing with visual and multimedial data has emerged as a key technology in many areas. However, the creation, processing, and management of these data types require an enormous computational effort, often too high for single processor architectures. Therefore, this fact taken together with the inherent data parallelism in these data types makes image processing, video processing, and multimedia natural application areas for parallel and distributed computing.

The Workshop on Parallel and Distributed Computing for Image Processing, Video Processing, and Multimedia (PDIVM'2001) brings together practitioners and researchers working in all aspects of parallel and distributed computing in these fields. PDIVM'2001 extends the scope of the workshops on Parallel Processing and Multimedia held at IPPS'97 and IPPS/SPDP'98 and follows PDIVM'2000 held at IPDPS'2000. The meeting serves as a forum for exchange of novel ideas on corresponding hardware developments, software tools, algorithms, system solutions, and all types of applications.

PDIVM'2001 aims to act as a platform for topics related, but not limited, to

- Parallel and distributed architectures and algorithms
- Dynamically reconfigurable architectures
- Parallel DSP systems and Media processors
- Application specific parallel architectures
- Languages, software environments and programming tools
- Parallel and distributed video and multimedia servers
- Networked multimedia systems, QoS techniques
- Applications, e.g. remote sensing, medical imaging, satellite image processing, set-top boxes, HDTV, mobile multimedia, cameras

After a successful meeting at IPDPS'2000, this years edition again features a very heterogeneous program ranging from parallel signal processing papers to contributions in the area of distributed multimedia servers thereby reflecting the broad scope of multimedia itself.

Proceedings of the 15th International Parallel and Distributed Processing Symposium (IPDPS '01)
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List of Accepted Papers

An Efficient System for Multi-perspective Imaging and Volumetric Shape Analysis (E. Borovikov, Sussman, L. Davis)

A Synchronization Scheme for Distributed Multimedia Servers and Mobile Clients using Quasi-Sink (A. Bourkerche, S. Hong, T. Jacob)

Fast parallel algorithm for distance transforms (A. Datta, S. Soundaralakshmi)

Dynamic Parallel media processing using Speculative Broadcast Loop (SBL) (J. Fritts, W. Wolf)

Porting Transputer Application to Multi-processors StrongARM System (E.W.K. Liew, B.C.O'Neill, A. Cawley, S. Clark)

EASY PIPE - An "EASY to use" Parallel Image processing Environment based on algorithmic skelekons (C. Nicolescu, P. Jonker)

Continous Wavelet Transform on Reconfigurable Meshes (Y. Pan, J. Li)

Popularity-based Partial Caching for VOD Systems using a Proxy Server (S.H. Park, E.J. Lim, K.D. Chung)

The Lazy Programmer's Approach to Building a Parallel Image processing Library (F.J. Seinstra, D. Koelma)

Real-Time Image Processing on IEEE-1394-based PC Cluster (H. Yoshimoto, D. Arita, R.-I. Taniguchi)

A Video Replacement Policy based on Revenue to Cost Ratio in a Multicast TY-Anytime System (X. Zhou, L.O. Burchard, R. Lueling)

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