High-Speed Communication Systems
and
Multimedia

VLSINET Meeting

June 26-27, 1997

Institute of Computer Science
Foundation for Research and Technology - Hellas
Science and Technology Park of Crete
Vassilika Vouton, P.O. Box 1385
GR 711 10 Heraklion, Crete
Greece

Organizer: Dimitrios N. Serpanos

Thursday, June 26, 1997 - Tutorial

Time: 10:00am -- 3:30pm

Room: Mediterranean Studies Seminar Room

"Digital Video: A Tutorial"

Dr. Ahmed Tantawy

IBM, T.J. Watson Research Center

Yorktown Heights, New York

U.S.A.

Contents:

- What is Digital Video
- Basic technology
- Standards: MPEG, DVB, DAVIC, etc
- Digital Video Transmission
- Digital TV: market and technology
- Some research experiments
- Discussion

Friday, June 27, 1997 - Presentations

Room: Mediterranean Studies Seminar Room

Session 1: High - Speed Switching

9:00-9:30
''ATLAS I: A General-Purpose, Single-Chip ATM Switch with Credit-Based Flow Control''
M. Katevenis, D. Serpanos and P. Vatsolaki (ICS-FORTH and Univ. of Crete)

9:30-10:00
''Pipelined Memory Shared Buffer for VLSI Switches''
M. Katevenis, P. Vatsolaki and A. Efthymiou (ICS-FORTH and Univ. of Crete)

10:00-10:30
''Pipelined Multi-Queue Management in a VLSI ATM Switch Chip with Credit-Based Flow Control''
G. Kornaros, C. Kozyrakis, P. Vatsolaki and M. Katevenis (ICS-FORTH and Univ. of Crete)

10:30-11:00: Break

Session 2: High-Speed Communication Systems & Networking

11:00-11:30
''Scalable Memory Management for ATM Networking''
P. Karakonstantis and D.N. Serpanos (ICS-FORTH and Univ. of Crete)

11:30-12:00
''Telegraphos: High-Performance Networking for Parallel Processing on Workstation Clusters''
E.P. Markatos and M. Katevenis (ICS-FORTH and Univ. of Crete)

12:00-12:30
''Pricing ATM ABR Services: Theoretical, Experimental and Architectural Issues''
G. Stamoulis, C. Courcoubetis and V. Siris (ICS-FORTH and Univ. of Crete)

12:30-14:00 : Lunch break

Session 3: Multimedia

14:00-14:30
''Low-Power Circuits for Multimedia Systems''
O. Koufopavlou (Univ. of Patras)

14:30-15:00
''On the Architecture of Multimedia Servers''
D.N. Serpanos (ICS-FORTH and Univ. of Crete)

15:00-15:30
''A Tele-teaching Application with Multimedia''
D. Mitrou (National Technical University of Athens)