

Preface

As the complexity of design, visualization and engineering increases rapidly, single-user's effort is no longer enough to accomplish ever-growing requirements. Group effort becomes essential. There are many industrial areas that demand strong CDVE support such as mechanical engineering, aerospace engineering, architecture design, engineering and building construction (AEC), etc. There are numerous other application areas where cooperative and concurrent working is becoming popular, such as entertainment program development, networked gaming, simulation, collaborative learning, etc.

Successful cooperative design, visualization and engineering highly depend on the advances in fundamental research areas such as concurrent processing, middleware, agent-based methods, design patterns, distributed systems, databases, transport protocols in network communication, human machine interaction, group behavior ..., just to name a few. There is a very tight relationship between cooperative design, visualization and engineering. Cooperative design will become impossible without cooperative visualization while cooperative engineering processes would not be complete without cooperative design and visualization.

From my research experience in the field since 1996 in the Spanish National R & D Project CICYT TEL 96-0544, 3D Cooperative Design System (Sistemas Cooperativos de Diseo en 3D), up to the European Esprit (IST) Project No. 26287, Multi-site Cooperative 3D Design System for Architecture, M3D, where I acted as the coordinator and main researcher during 1998–2001, it has been my personal dream to organize an international conference to bring researchers in related areas together. The CDVE 2004 conference is a personal dream that came true. I would like to express my thanks to all the members in the international program committee for their generous support to make the conference possible. The conference provided a unique opportunity to bring multi-disciplinary experts and practitioners together to exchange their experience in cooperative design, visualization and engineering. Over 100 authors from 16 countries and 5 continents contributed to the final program of the conference. We were excited to see contributions from all the aspects of cooperative design, visualization and engineering, as well as cooperative simulation, cooperative learning, cooperative control and many other applications.

We hope that the conference itself was a very first beginning of a continuous cooperative working group effort to promote research and development in this field.

September 2004

Yuhua Luo

Organization

CDVE 2004 was organized by the University of Balearic Islands, Spain, the International Information Visualization Society, and the Special Interest Group on Cooperative Design and Visualization (SigCDV), Information Visualization Society.

International Program Committee

Conference Chair:

Professor Yuhua Luo	Department of Mathematics and Computer Science, University of Balearic Islands, Spain
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