Distributed object systems are increasingly used within diverse IT organizations. These systems offer many promises for their use in various applications, including telecommunications, distribution, manufacturing, web-based news and media systems, and more recently banking applications. They provide solutions to technical problems, including interoperability across different software and database platforms. Distributed object systems are generally built according to different paradigms and architectures, such as OMG’s CORBA and other object request broker principles and implementations, and proprietary technologies such as Sun’s Java and Microsoft’s COM, to provide a basis for building complex distributed applications.

As for other systems, such as database systems, the future success of distributed object systems will be not only dependent on how the basic requirements (to develop open, scalable and reliable distributed and heterogeneous applications and platforms) are met but also how the underlying distributed object technology can be integrated with existing complementary technologies and applications, such as WWW, multimedia and databases. Also legacy systems may sometimes substantially benefit from a reengineering effort using distributed objects, e.g. to turn them into data warehouses.

The 1999 IEEE International Symposium on Distributed Objects (DOA’99) focus is on both the fundamentals problems of distributed object systems as well as their practical use and evaluation for real world applications. The aim of the symposium was to provide a forum for both researchers and practitioners in such systems to be able to evaluate existing ORB middleware products; to propose solutions to major limitations of existing products; and to introduce promising future research directions for distributed objects. A special emphasis was particularly put on the evaluation of existing distributed object systems and how they are used to design and to implement large scale industrial distributed applications. Specifically, the topics and the issues of the symposium included: distributed business objects, distributed and mobile agents, database services (in particular persistency, transaction, query and replication services), intelligent traders, interoperability-supporting environments, design of CORBA, COM- and Java-based broker applications, multimedia distributed objects, multicast protocols for distributed object, object caching, reliability, fault-tolerance and recovery, real-time ORB middleware, security, and specification and enforcement of quality of service.

Eighty one papers were submitted to the DOA’99 symposium, and all of them were related to distributed object systems. Every paper was submitted in full and read by three referees who are experts in the area of distributed objects and they are also accustomed to conference and journal refereeing. Any paper with a little