Introduction

The second International Workshop on Collaborative Peer-to-Peer Information Systems, COPS06 was held in Manchester University as part of WETICE-2006. It was the second meeting devoted to the study of the emerging field of Cooperative Information Systems and P2P networks or Cooperative P2P-based Information Systems (COPS). The first edition has been focused on trust management and middleware. This tendency has been confirmed in this second edition, but other important areas have been received attention. Among these COPS for real time and multimedia applications. In addition the service oriented approach is emerging as a unifying approach to describe COPS systems in a more technical way.

Workshop Papers

Eight papers were received, of which six were accepted for publication as regular papers, and one was accepted as a short paper. They can be classified as:

1. Trusted and Real Time Collaboration
2. Support for Collaboration
3. Service-Oriented COPS

Trusted and Real Time Collaboration

The paper, “A Trust-enabled P2P Recommender System” by Georgios Pitsilis and Lindsay Marshall discusses a protocol that can use trust in a P2P recommendation system. It provides simulation results and some analysis.

The paper, “Social behaviours applied to P2P Systems: An efficient algorithm for resources organisation” by Vincenza Carchiolo, Michele Malgeri, Giuseppe Mangioni, Vincenzo Nicosia discusses PROSA system that behaves similar to a social networks evolving towards a small world network. The paper presents a depp theoretical analysis with some simulation results.

The paper, “A Hybrid P2P Protocol for Real-Time Collaboration” by Dewan Tanvir Ahmed and Shervin Shir Mohammadi discusses a real time multimedia system based on a fault tolerant architecture. The system provides the capability to reconfigure a sort of fault streaming. It seems very innovative even if with some preliminary results.

Support for Collaboration

The paper, “Exploiting the TTL rule in Unstructured Peer-to-Peer Networks” by
Georgios Pitsilis, Panayiotis Periorellis focuses on a particular case of abuse at architectural level. This abuse happens when peers exploit too much the TTL rule. The paper analyzes some scenarios and makes some conclusions on the basis of simulation experiments.

**Service-Oriented COPS**

The short paper “Geo-collaboration and P2P Geographic Information Systems: Current Developments and Research Challenges” by Alenka Krek and Manfred Bortenschlager makes a survey on the reasons that motivates P2P architectures for GIS applications. The paper outlines some key motivating factors among which mobility and cooperative multimedia.

The paper “Towards a Decentralized p2pWeb Service Oriented Architect” by Rubén Mondéjar, Pedro Garcia, Carles Pairot and Antonio F. Gómez Skármeta, based on the reviewer evaluations and presentation at the workshop it was ranked as the best paper of COPS05. It continues a tradition established the previous year, but focuses on some interesting applications. It provides a deep description of the framework and a well-balanced discussion about different aspects with real-life examples.

The paper “A Model-driven Framework for Managing the QoS of Collaborative P2P Service-based Applications” by Michele Angelaccio and Andrea D’Ambrogio discusses a QoS management framework for dynamic P2P-based SOA architecture by exploiting the ability to predict performance parameters via a model driven approach. It is a preliminary work with a complete architectural description of the framework and a corresponding test-case.