Special section: Peer-to-peer grid technologies 許慶賢,Hai Jin,Franck Cappello Computer Science & Information Engineering Computer Science and Informatics chh@chu.edu.tw

## Abstract

In the last few years, we have observed an explosive growth of P2P and Grid computing which is emerging as the next-generation information technology. This new paradigm has been embodied into tremendous services models through lots of ubiquity-related technologies to provide computing and communication services anytime and anywhere. In parallel to this, virtualization technologies have evolved to a stage where they are capable of

connecting cyber and physical domains, in such era, computers in the traditional sense gradually fade from view, making information and communication mediated by computers available anywhere and anytime through devices that are embedded in our environment, completely interconnected, intuitive, effortlessly portable and constantly available. This special issue includes seven papers, selected from 30 submissions (comprising a 23% acceptance rate) from researchers in Canada, Singapore, Greece, UK, Taiwan, Australia, China, Brazil, Korea, Spain, and USA, who have demonstrated the effectiveness and efficiency of a variety of theories, optimizations, architecture, applications and services models in different areas of P2P, grid and scalable computing. The papers selected for this issue not only contribute valuable insights and results but also have particular relevance to the P2P and grid computing community. All of them present high quality results for tackling problems arising from the evergrowing P2P and grid services.

Keyword: Peer-to-peer, grid