

Keynote speakers

Dick Epema, Delft University of Technology, the Netherlands

Title: *P2P File Sharing: Past! -- Present -- Future?*

Abstract

Peer-to-peer (P2P) file sharing is now over a decade old. It started at a time when home Internet connections (and the Internet itself) had much less capacity than today, when YouTube did not yet exist (and the world was much less video-ized), when TeraByte disks belonged to supercomputers, and when online social networks were virtually non-existent. Initiated by Napster and revolutionized by BitTorrent, P2P file sharing has come to use a large fraction of the capacity of the Internet. The most fruitful research strands in P2P systems in the scientific world have been the elegant but difficult to use and difficult to secure Distributed Hash Tables and the simple but inspiring BitTorrent-based swarm-based P2P systems. Still, not all is well: P2P systems are very much associated with illegal content, and the viability of research in P2P systems is questioned in some quarters. So it is time to take stock of the field, and in this talk, I will survey the history of (research in) P2P file-sharing systems, assess the present state of affairs, and try to synthesize my expectations for the future.

Biography

Dick Epema is an associate professor in the Parallel and Distributed Systems Group of Delft University of Technology in the Netherlands. He holds an MSc in mathematics and a PhD in algebraic geometry from Leiden University, and an MSc in computer science from Delft University of Technology. His research interests are in the areas of performance analysis, distributed systems in general, and in peer-to-peer systems, grids, and clouds in particular.

In the area of grids and clouds, his focus has been on resource management and scheduling, both from a theoretical perspective and from a design and experimental point of view.

An important topic has been processor co-allocation, that is, the distribution of single parallel applications across multiple clusters. His grid research centers around the KOALA grid scheduler, that has been deployed on the Dutch DAS multicluster system and that has processor co-allocation as one of its main features.

In the area of peer-to-peer systems, his research is on performance aspects (measurements, improvement of download speed), on all aspects of video distribution (recorded, live, and VoD) in swarm-based P2P systems, and on reputation systems, and is part of the research and development of the Tribler P2P system.

Dick Epema has obtained many research grants from the Dutch National Science Foundation NWO, the European Union, and the Dutch government. He is the (co-)author of over 80 scientific papers, and has been on numerous program committees of conferences in distributed systems, performance analysis, grids, and P2P systems. He was a general co-chair of the EuroPar2009 conference and of the IEEE P2P 2010 conference. He is general chair of the 21st Int'l ACM Symp. on High-Performance Parallel and Distributed Computing, which will be held in Delft in June 2012.

Shigeo Tsujii, Foundation for MultiMedia Communications, Japan

Title: *Information Society, Security and Ethics*

Abstract

We are now beginning to live in a new information society symbolized by the 4 key words, namely, Social, Mobile, Cloud and Smart, all of which we have never experienced before and we are not yet accustomed to this new world.

To cope with the advent of such a new information society, information security and ethics as bases of our lives are becoming increasingly important.

Basic concept of my talk is as follows;

- (1) Freedom (convenience, efficiency etc), security and privacy are key values of information society.
- (2) These three values are liable to conflict with each other and among them sometimes three contradictions arise.
- (3) It becomes inevitably important to overcome these contradictions and find a high balanced position (Aufheben).
- (4) To achieve this Aufheben, technology, law, management and ethics should be strongly connected and cooperated each other from the view point of total optimization.

In this talk, following items will be presented

1. Effect of new information technology to our society with arguments concerning copy right and privacy protection problems as examples.
2. Philosophy and concept of information security
3. Information security as integrated science
4. Ethics in information society and ethics for information technology engineers.
5. Human Resource development for information security and ethics

Biography

Shigeo Tsujii is the President of Foundation for MultiMedia Communications, Japan. He received a BA in Electrical Engineering and a Doctor of Engineering from Tokyo Institute of Technology in 1958 and 1970, respectively. After joining NEC in 1958, he served as Associate Professor and Professor for Yamanashi University and Tokyo Institute of Technology and Chuo University during 1965 to 1994. From 1994, he serves for Chuo University. He is a Professor of Research and Development of Chuo University new. He also works as the President of Foundation for MultiMedia Communications, Japan from 2010.

He has also strongly contributed to the academic community as the President of IEICE (The Institute of Electronics, Information and Communication Engineers) in 1996, the IEEE Japan Council Chair from 2003 to 2004 and the Member of the Science Council of Japan from 2003 to 2005. He received the Achievement Award of IEICE in 1985, the Contribution Award of IEICE in 1996, the Memorial Award of Third Millennium of IEEE in 1996, the Award of Ministry of Internal Affairs and Communication in 2003 and the 55th NHK Broadcast Culture Award in 2004.