

# Main Topics

Topics include, but are not limited to, the following areas:

## 1. Relationship between the Web Architecture and other computational areas

- 1.1. Software Engineering and Web Information Systems
- 1.2. Frameworks and software architectures for Web-based systems
- 1.3. Web-based Artificial Intelligence
- 1.4. Intelligent Agents
- 1.5. Knowledge Acquisition and Representation
- 1.6. Information Retrieval and Filtering
- 1.7. Data and Text Mining
- 1.8. Automatic Control Web-based systems
- 1.9. Metrics Quality Assurance
- 1.10. Human Computer Interface and Modern User Interfaces
- 1.11. Usability
- 1.12. Authentication and/or repudiation Systems
- 1.13. Web Security

## 2. Web-based Systems

- 2.1. (Semantic) Web Services
- 2.2. Automatic discovery of Web services
- 2.3. Choreography of Web services technologies
- 2.4. Proof and Trust on the Semantic Web
- 2.5. Merging/Aligning/Combining Ontologies
- 2.6. Semantic Web applications
- 2.7. Semantic interoperability
- 2.8. XML
- 2.9. Domain mark-up languages (XBRL, HR7, etc.)
- 2.10. Relational Databases/XML bridges
- 2.11. Native XML Databases
- 2.12. Vertical-Domain Applications (ITS, Healthcare, Law, etc.)
- 2.13. Enterprise Applications Integration (EAI)

## 3. Distributed Systems

- 3.1. Middleware Systems for Grids and Cluster
- 3.2. Semantic Grid
- 3.3. Software tools for Cluster and Grids
- 3.4. Grid-based Problem Solving Environments
- 3.5. Computational and Information Grid Architectures and Systems
- 3.6. Scientific, Engineering, and Commercial Grid Applications
- 3.7. Programming Models, Tools, and Environments
- 3.8. Performance Evaluation and Modeling
- 3.9. Portal Computing / Science Portals
- 3.10. Distributed Artificial Intelligence
- 3.11. Multi-agent systems in information integration

## 4. Mobile Computing and Applications

- 4.1. Internet access and applications
- 4.2. Mobile Multimedia
- 4.3. Multi-modal architectures and applications
- 4.4. M-Commerce, M-Learning and M-Entertainment
- 4.5. Location Based Services
- 4.6. Data mining concepts for location based services
- 4.7. Security and privacy in location based services
- 4.8. GPS applications
- 4.9. MMS frameworks and architectures
- 4.10. In-car and GIS based systems
- 4.11. Video-conferencing and Tele-presence
- 4.12. Context aware applications
- 4.13. Adaptive filters for navigation and tracking
- 4.14. Security and Quality of Mobile Internet Applications

- 5. Protocols for Wireless and Mobile Networks
  - 5.1. Protocols for Wireless and Mobile Internet
  - 5.2. Performance evaluation of wireless networks
  - 5.3. Wireless systems simulation
  - 5.4. IPv6
  - 5.5. Design methodologies for wireless systems
  - 5.6. Quality of Service (QoS)
  - 5.7. Security in sensor networks
  - 5.8. Mobility management in next generation networks

- 6. Web Technologies and Society
  - 6.1. Intellectual Rights
  - 6.2. Web accessibility
  - 6.3. Web Information systems for Disabled
  - 6.4. Web internationalisation
  - 6.5. Web information systems for citizens
  - 6.6. E-Government, E-learning, E-Business
  - 6.7. Electronic Bank
  - 6.8. Biometrics techniques and privacy
  - 6.9. Internet strategies based on the Internet
  - 6.10. Videoconferencing and Tele-presence
  - 6.11. Preservation of Digital Culture
  - 6.12. Medical Informatics
  - 6.13. Business Intelligence Applications