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**Track I: Computer Systems**
- Cloud computing
- Computer architectures
- Computer hardware technology
- Computer-aided designs and technology
- Display technology
- Digital circuits, systems and logic design
- Embedded systems
- Evolutionary algorithms and computing
- Fuzzy systems and fuzzy logic
- Green computing
- Grid computing and architectures
- Hardware and software co-design
- High-performance computing
- Input/output systems
- Low-power computer technology
- Memory systems
- Mobile computing
- Modeling and simulation
- Object Oriented Languages
- Operating system and middleware for mobile computing and networking
- Performance evaluation
- Pervasive computing
- Real-time systems and simulations
- Reconfigurable computing
- System integration
- Systems on chip (SoC)
- Scientific computing algorithms
- Soft computing
- Software design, verification and validation
- Software performance and engineering
- Social networking and computing
- VLSI design

**Track II: Information Technology**
- Agents and multi-agents systems
- Artificial intelligence and expert systems
- Adaptive learning automata
- Bioinformatics and biological computing and engineering
- Database and data warehouses
- Data mining
- Future web
- e-Government
- e-Commerce
- e-Health
- e-Learning and adaptive learning
- Geographical information systems (GIS)
- Global positioning systems (GPS)
- Human-computer interaction (HCI)
- Network systems, proxies and servers
- Neural networks
- Protocols and standards
- Signal and image processing
- System engineering
- Telematics
- Web-Based Simulation Applications

**Track III: Web Technologies**
- Accessibility issues and Technology
- Data Fusion
- Digital Libraries
- Content transformation and adaptation in proxy server
- Metadata and metamodeling
- Multimedia
- Ontology and semantic web
- Personalized web sites/Web site classification and optimization
- Portal strategies
- Quality recommendation for software service provisioning
- Service oriented architecture
- System integration
- User modeling
- Usability and ergonomics
- Web analytics
- Web services and engineering
- Web interfaces and applications
- Web searching, browsing and ranking
- Web information retrieval
- Web intelligence
- Web performance measurement, modeling and caching
- XML and data management

**Track IV: Networking Systems**
- Bio-inspired and nature-inspired solutions in wireless ad hoc and sensor networks
- Broadband access technologies
- Cognitive radio
- Cross-layer design for mobile and wireless networks
- Dynamic spectrum management
- Disruption tolerant networks
- Energy-efficient networks
- Future Internet
- Hybrid networks
- Medium access control protocols
- Network management
- Network services and protocols
- Optical networks
- Opportunistic networks
- Personal area networks
- Performance-oriented design and evaluation focused on networks and mobile applications
- Quality of service provisioning
- Routing protocols
- Sensor networks
- Smart grids
- Testbed design and implementation
- Traffic Eng. & measurements
- Under water networks
- 60 GHZ networking
- Wireless networks

**Track V: Telecommunication Systems**
- Adaptive communications
- Channel estimation
- Cooperative communications
- Channel coding
- Interference management
- Modulation techniques
- MIMO systems
- Novel applications enabled by telecommunication networking systems
- OFDM communications
- Power line communication
- Satellite communication
- Spread-spectrum communications
- UWB communications
- Wireless access
- Wireless communication

**Track VI: Security Systems**
- Authentication and access control
- Biometrics systems
- Computer and communication security
- Cryptography and cryptanalysis
- Digital watermarking, fingerprinting, and traitor tracing schemes
- Detection analysis and prevention of malware
- Denial of service issues
- Intrusion detection systems
- Information systems security
- Keystroke dynamic systems
- Multimedia security
- Network security
- Network systems forensics
- Operating systems security
- Program security
- Physical security
- Privacy enhancing technologies
- Public key infrastructure systems
- Quantum cryptography
- Security of E-Systems and applications
- Security modeling, tools & simulation
- Security of personal area networks
- Security of Wi-Fi and WiMAX systems
- Security of web systems
- Secure PHY and MAC protocols
- User & location privacy
- Virtual Private Network systems
- Vulnerability and Virus analysis
- Vulnerability and attack modeling
- Web security and privacy
- Web-based application security

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Extended versions of selected papers will be published in related special issues of Scholarly International Journals.

**Important Dates**
- Paper submission: **Extended to July 31, 2020**
- Invited session, workshop, tutorial proposals: **Ext. to July 25, 2020**
- Camera-ready paper submission: **Extended to September 11, 2020**

**Author notification:**
- **Ext. to August 30, 2020**

**Conference website:**
- [http://atc.udg.edu/CITS2020/](http://atc.udg.edu/CITS2020/)

**Virtual Conference**
- October 5-7, 2020
- Ext. to August 31, 2020

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