Topics including, but are not limited to:

1. **Intelligent Reality Science and Foundations**
   - *Advanced Analytical Models*
   - *Efficient neural network inference Engines, Transfer Learning*
   - *Innovative Rendering Models*
   - *Security, Privacy, Integrity, and Ethics*
   - *Evaluation Metrics and Methodologies*
   - *Novel Quality Models*
   - *Quality of Experience*
   - *New Standards*
   - *Others…*

2. **Intelligent Reality Technology and Infrastructure**
   - *Neural Network Compression*
   - *Point Cloud Compression*
   - *Immersive Visual Media: Omidirectional, 360, 3DoF, 3DoF, 6DoF+, etc.*
   - *Spatial Audio, 3D Surround Sounds*
   - *Geometric Modeling and Design*
   - *Media Coded Representation*
   - *Interact Machine Learning between Virtual Objects and Real World*
   - *Interoperability between Machine Learning, Virtual Objects, and Real World*
   - *Sensor Fusion*
   - *Visual Analytics*
   - *Multimodel Interaction and Experience*
   - *Rendering Techniques*
   - *System Architectures, Design, and Deployment*
   - *Energy-efficient Computing*
   - *New Programming Models and Environments*
   - *Software Techniques and Architectures*
   - *Others…*

3. **Hardware, Acceleration, Devices for Intelligent Reality**
   - *AR Glasses, VR Headsets, other AR/VR Form-Factors, Smart Devices*
   - *Sensors technology in actuators, tactile, haptic, etc. for IR applications*
   - *Network on Chip, System on Chip, Programmable Chip*
   - *FPGA/CGRA/GPU/etc. accelerators for IR applications*
   - *Operating system support and runtimes for hardware accelerators*
   - *Programming models and platforms for accelerators*
   - *Novel system organizations and designs*
   - *Computation in memory/storage/network*
   - *Others…*

4. **Intelligent Reality Applications**
   - *Arts, Games, Leisure, Sports, and Entertainment*
   - *E-commerce, Retail, Real Estate*
   - *3D Model and Terrain Data*
   - *Interior Design, Landscaping & Urban Planning*
   - *Tourism and Travel*
   - *Telepresence, Teleoperation, collaboration, and social interactions*
   - *Education, Simulation, and Training*
   - *Healthcare, Medicine, Therapy*
   - *Transportation, Automotive, Aerospace*
   - *Geospatial*
   - *Finance*
   - *Industrial, Military, Emergency Response*
   - *Communication and Collaboration*
   - *Manufacturing and Occupational Safety*
   - *Advertising & Marketing*
   - *Government, Public Sector and Society in General*
   - *Others…*

Topics including, but are not limited to (cont.):

5. **Intelligent Reality Services**
   - *Emergency*
   - *Environmental*
   - *Public Safety*
   - *Health Care*
   - *Public Transportation*
   - *Travel and Booking*
   - *Public Buildings*
   - *Repair & Maintenance*
   - *Social*
   - *Urban Planning*
   - *Professional*
   - *Housing*
   - *Tourism*
   - *Others...*

6. **Intelligent Reality Management**
   - *Content Creation, Authoring, and Management*
   - *Analytics Services and Management*
   - *Scalability and Efficiency between AI, Virtual Objects, and Real World*
   - *Data Acquisition, Integration, Cleaning, and Best Practices*
   - *Visualization Analytics*
   - *Computational Modeling and Data Integration*
   - *Others...*

7. **Social Connection and Concerns for Intelligent Reality**
   - *User Behaviors and Psychology*
   - *Groups and Communities Interaction*
   - *User Safety for in Social Environments*
   - *Others...*

8. **Security, Ethics, Privacy, and Trust for Intelligent Reality**
   - *Research in Security, Privacy, Integrity, and Ethics*
   - *Techniques and Models for Fairness, Diversity, Transparency, and Interpretability*
   - *Experimental Studies of Fairness, Diversity, Accountability, and Transparency*
   - *User Impacts of Novel Attacks*
   - *Trade-offs between Transparency and Privacy*
   - *Intrusion, Anomaly, Threat Detection*
   - *Multi-layer Defensive Frameworks*
   - *Novel Threats, Attacks, Mitigations*
   - *Trust Management*
   - *Others...*