

CYBERWORLDS

2-4 October
Kyoto

2019

International Conference

www.cyberworlds-conference.org

www.art-science.org/cyberworlds-conference.org

Cyberworlds are information spaces and communities that immensely augment the way we interact, participate in business and receive information throughout the world. Cyberworlds seriously impact our lives and the evolution of the world economy by taking such forms as social networking services, 3D shared virtual communities and massively multiplayer online role-playing games.

General track:

- Computer graphics for cyberworlds
- Visual analytics in cyberworlds
- Virtual humans and avatars
- Applications of augmented and virtual reality
- Social computing and services
- Multimodal interaction and rendering
- Virtual collaborative spaces
- Multi-user web games
- IoT and wearable computing
- Computer vision for augmented and virtual reality
- Online communities
- Networked and shared virtual worlds
- Art and heritage in cyberspace, cyber-museums
- E-learning in cyberworlds
- Cyberethics and cyberlaws
- Welfare in cyberworlds
- Data mining and warehousing in cyberworlds
- Real-time analytics, modelling, and simulation for the future smart cities and urban mobility
- 3D city modelling, processing and simulation
- Generation of building/city models
- Predictive analytics and machine learning for smart cities and smart manufacturing
- Computer vision for industry 4.0 / smart manufacturing
- Optical inspection for industry 4.0 / smart manufacturing
- Virtual and Augmented Reality for smart cities and smart manufacturing
- Color theory and image recoloring for color vision defect support
- VR/AR for the vision impaired
- Image-based ophthalmologic diagnosis
- Image processing/computer vision for vision enhancement

Cognitive Human-machine Interaction:

- Cognitive informatics
- Human factors in transportation, maritime, industry 4.0
- Neurorehabilitation and neuroplasticity
- Affective computing
- Mobile BCI
- Machine learning and deep learning for EEG-based algorithms
- Multi-modal Interfaces
- Neurofeedback systems and games
- BCI applications
- Human-robot interaction
- Game innovation for active living
- EEG-based neuroimaging
- Mobile and adaptive BCIs
- Machine-assisted cognitive enhancement
- Emotion artificial intelligence
- Human intelligence machine coexistence

Cybersecurity and Biometrics:

- Security protocols
- Authentication protocols
- Privacy protocols
- Password security
- Security of personal data
- Content protection and digital rights management
- Risk and reputation management
- Identity and trust management
- Information hiding and anonymity
- Privacy, security and trust in social media
- Security of embedded systems
- Behavioral biometrics
- Performance evaluation of biometric systems
- Multi-biometrics
- Quality of biometric data
- Biometric template protection
- Presentation attack detection
- Emerging biometrics

SUBMISSION CATEGORIES: full papers (up to 8 pages), short papers (up to 4 pages), and poster papers (up to 4 pages)

CONFERENCE PROCEEDINGS with all accepted papers will be published by Conference Publishing Services as well as submitted to the IEEE Xplore Digital Library, IEEE Computer Society Digital Library and reference databases of all major referencing indices including EI Compindex, Scopus and SCI

(Pending confirmation) SPECIAL JOURNAL ISSUES will consider for publications extended versions of all accepted full papers: Computers & Graphics (Elsevier); The Visual Computer (Springer); Transactions on Computational Science (Springer, LNCS); Advanced Engineering Informatics (Elsevier); Journal of Future Generation Systems (Elsevier)

General Co-Chairs

Kiyoshi Kiyokawa, Takayuki Itoh

Program Co-Chairs

Masahiro Toyoura, Issei Fujishiro, Alexei Sourin

Keynote Speakers

Tobias Höllerer (UCSB), Tomohiro Kuroda (Kyoto University),
Satoshi Tanaka (Ritsumeikan University)

In corporation with:

