WELCOME

July 18-22 , 2021, French Riviera, France

IARIA

DigitalWorld 2021

ICDS, ACHI, GEOProcessing, eLmL, eKNOW, eTELEMED, ALLSENSORS, SMART ACCESSIBILITY

Enjoy permanent free access to the .pdf presentations and/or prerecorded videos along with their corresponding papers.

MANY THANKS FOR YOUR HARD WORK AND SUPPORT

Tough times ask for tough scientists and here you are. Authors, Chairs, Reviewers, Logistics acted exemplarily and put together an exceptional program.

TUTORIAL LECTURES

- **5 TUTORIAL SPEAKERS**

Tips for Young IT Researchers in The Medical and Healthcare Fields
Professor Emeritus Yoshitoshi Murata, Iwate Prefectural University, Japan

Systemic Digital Transformation Governance Framework to Provide Holistic Public Sector Digital Service Development and Provision
Dr. Samantha Papavasiliou, Australian Taxation Office & University of Adelaide, Australia

Sensors and Pattern Recognition for Localized Control of Weeds in Agriculture
Prof. Dr. Paulo E. Cruvinel, Brazilian Corporation for Agricultural Research (Embrapa) and Invited Professor - Federal University of São Carlos (UFSCar), Brazil

Practical Ways to Engage and Interact with Students in Online Courses
Prof. Dr. Tamara Powell, Kennesaw State University, USA
Prof. Dr. Stephen Bartlett, Kennesaw State University, USA

Non-fungible Token and Geo Data Processing
Dr. Zhaoming Yin, Google, USA

KEYNOTE SPEAKERS (I)

10 KEYNOTE SPEAKERS

An Introduction to Intelligent GeoProcessing
Prof. Dr. Robert Laurini, Knowledge Systems Institute, USA

Blockchain and Knowledge management
Prof. Dr. Samia Aitouche, University Batna 2, Algeria

AI and Remote Sensing: Applying the Deep Learning for Image Enhancement, Analytics, and its Business Applications
Dr. Jui-Hsin (Larry) Lai, Ping-An Technology - Research Lab, USA

User Analytics: Modeling User Behavior and Predicting User Intention
Assist. Prof. Dr. M. Omair Shafiq, Carleton School of Information Technology | Faculty of Engineering and Design | Carleton University - Ottawa, Canada

Agent Modeling, Internet of Things, and Multi-Dimensional Accounting for Managing Manufacturing Systems
Prof. Dr. Takao Terano, Chiba University of Commerce / Tokyo Institute of Technology / University of Tsukuba, Japan

KEYNOTE SPEAKERS (II)

10 KEYNOTE SPEAKERS

Blended Learning of IoT and AI for Business in Recurrent Education Program SmartSE
Prof. Dr. Hironori Washizaki, Waseda University, Japan

User-led Accessible Technology Research for the Deaf and Hard of Hearing in Human-computer Interaction
Prof. Dr. Yuhki Shiraishi, Tsukuba University of Technology, Japan

Putting the Digital into Towns: How Ready are Rural Towns for Digital Transformation? An Analysis of Five Irish Rural Towns
Prof. Dr. Theo Lynn, DCU Business School / Irish Institute of Digital Business, Ireland

Perspectives and Challenges of Quantum Computing in Geo-Engineering Domain
Dr.-Ing. Dr. (PhD) Alexey Cheptsov, High Performance Computing Center Stuttgart, Germany

Enhancing Ground Penetrating Radar Signals Through Frequency Compositing
Roger Tilley, Ph.D. Senior Member of the Technical Staff, Sandia National Laboratories, Livermore, CA, USA

ONE EXPERTS PANEL

Digital Twins: A 360° Tour of Life Cycle and Applications on Built Environments

(software development, sensing, industrial use cases, predictive maintenance, social use cases, products, constructions, arts, etc.)

Chair

James Candon, Managing Director, United Europe, Germany

Panelists

Olga Levina, TH Brandenburg, Germany

Mohamad Kassem, University of Northumbria Newcastle, UK & RINNO Consortium

Lasse Berntzen, University of South-Eastern Norway, Norway

Camelia Chivăran, University of Cambridge / University of Campania "Luigi Vanvitelli", UK / Italy

Jean-Pierre Toumazet, Université Clermont Auvergne, France

SEVEN SPECIAL TRACKS

DHS-COVID-19: Digital Health Surveillance and COVID-1
Chair: Prof. Dr. Theo Lynn, Dublin City University Business School, Ireland

EU SPACE: European Research Horizons
Chair: Dr. Pierangelo Rosati, Dublin City University, Ireland

AGAS: Agent and Gaming Approach to Socio-Technical Systems
Chair: Prof. Takao TERANO, Chiba University of Commerce, Japan terano@cuc.ac.jp
Organizers:
Prof. Setsuya KURAHASHI, University of Tsukuba, Japan kurahashi.setsuya.gf@u.tsukuba.ac.jp
Prof. Hiroshi TAKAHASHI, Keio University, Japan htaka@keio.ac.jp

SEGAHW: Serious Games and Services for Wellbeing and Health
Chair: Marie Sjölinder, PhD, Senior Researcher, RISE Research Institutes of Sweden, Sweden

HCIP: Human Computer Interaction in Practice
Chair: Dr. Eng. Prima Oky Dicky Ardiansyah, Iwate Prefectural University, Japan

LECILA: Learning Engineering: Courseware Instrumentation and Learning Analytics
Chair: Erin Czerwinski, Manager, Learning Engineering and Technology Enhanced Learning Product Carnegie Mellon University, USA

MEDIRE: Computer-aided Medical Diagnosis and Rehabilitation Systems
Chair: Dr. Eng. Prima Oky Dicky Ardiansyah, Iwate Prefectural University, Japan

SPECIAL THANKS for supporting PERMANENT & FREE ACCESS

Special thanks to ALL contributors!

IARIA proceedings and journals are free-access with no subscription and no-publication-fees for journal contributions (see ThinkMind Digital Library, www.thinkmind.org and Journals www.iariajournals.org).

The only operational support comes from registration fees. This generous and ethically fair knowledge sharing model cannot survive a pandemic without true believers in free-access to knowledge and information, which is IARIA's philosophy and vision.

Thanks to all outstanding scientists contributing to DigitalWorld 2021 program!

For 2021, all events will be held in a hybrid mode with 5 options: on site or virtual choices (live, prerecorded videos, voiced presentation slides, and .pdf slides).

We hope for better times allowing us to return to the traditional on-site scientific events. However, we are ready to adapt to any unexpected circumstances.

Hoping that 2022 will be a more agreeable year!

Special and Regular Contributions

Despite the ups/downs of the virus, early submissions were more enthusiastic as everyone was hoping that the Spring season 2021 will find us safe, but also virus-free. We wish this were the case and everyone could have attended in person and enjoyed the event.

It is important to say that the help and contributions of all active members, chairs, keynote speakers, tutorial speakers, chairs, authors and members of the respective program committees were outstanding. The result is illustrated by a very rich and instructive program.

We hope you will enjoy it.

Hope dies last! Hoping for better with *DigitalWorld 2022.*

Be Safe and Stay Healthy!

Chairs & Logistics

July 18, 2021