INTERNATIONAL CONFERENCE ON SUSTAINING HERITAGE: INNOVATIVE AND DIGITAL APPROACHES

18-19 JUNE 2023
VIRTUAL CONFERENCE
KINGDOM OF BAHRAIN

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Website: https://heritage.uob.edu.bh/

International Conference on Sustaining Heritage: Innovative and Digital Approaches

INTRODUCTION

With the ongoing changes in technology and globalization, sustaining intangible and tangible heritage comprises one of the recurrent national challenges worldwide. With the various initiatives of the United Nations and its affiliated organizations, many nations and states are developing national plans to sustain heritage through innovative and digital solutions, employing the SDGs of sustainable cities and communities, which also involves decent work and economic growth as well as partnerships for the goals. The main theme for this year's conference is Innovative and Digital Approaches that opt to sustain the various aspects, arts, and performances of heritage in its tangible and intangible forms. The conference vows to stand as an academic hub that accommodates various approaches to preserving, representing, and sustaining heritage and culture.

Within this context, this conference aims to provide an excellent international platform for academic researchers, anthropologists, tourism and hospitality sectors, business managers, development experts, specialists, and heritage experts to meet and exchange their ideas and novel approaches to sustain intangible and tangible heritage through innovation and digitalization. It provides a premier interdisciplinary forum for sharing knowledge and discussing the most recent innovations, trends, and practical challenges and solutions in the fields of cultural heritage, a rising trend in most developing and developed countries and nations. This interdisciplinary discussion also presents innovative and digital methods to sustain heritage in a way that supports the national economy by creating successful partnerships between governmental sectors and international offices of the United Nations. In addition, the conference illustrates the significance of sustaining heritage in the different sectors, such as educational bodies, public and private sectors, hospitality and tourism, and international presentations and conferences. Therefore, the main goal is to encourage a sustained heritage through different methods and environments.

We are looking forward to making this conference inclusive and multicultural, approaching heritage and culture in its tangible form, including architecture, fine arts, fashion, and design, and its intangible forms, such as folklore, music, folktales, and language. Digital heritage and stories of success in the heritage context are also more than welcome. After all, the conference aims to explore heritage and culture from diverse angles and through various approaches.

International Conference on Sustaining Heritage:
Innovative and Digital Approaches

CONFERENCE
PROGRAM
SCHEDULE

DAY 01: 18 JUNE 2023

| 8:00 - 9:00 | TECHNICAL SUPPORT |

CONFERENCE MAIN HALL

9:00 - 9:05	National Anthem
9:05 - 9:10	Welcome Note by Prof. Najla Allani
9:10 - 9:20	President's Speech by H.E. Dr. Fuad Al Ansari, President of University of Bahrain
9:20 - 9:30	Deanship of Graduate Studies and Scientific Research Speech by Dr. Athraa Sabbas Sali Almosawi
9:30 - 9:40	Dean of College of Engineering Speech by Dr. Haifa Ebrahim Mohamed Alkhalifa
9:40 - 10:50	Keynote Speech Prof. Kirsi Lorentz (Cyprus)

| 10:50 - 11:00 | BREAK |

11:00 - 11:20			
11:20 - 11:40			
11:40 - 12:00	SESSION A1	SESSION A2	SESSION A3
12:00 - 12:20			
12:20 - 12:40			

Closing Remarks: End of Day 01

DAY 02: 19 JUNE 2023

9:00 - 9:20			
9:20 - 9:40			
9:40 - 10:00	**SESSION B1**	**SESSION B2**	**SESSION B3**
10:00 - 10:20			
10:20 - 10:40			
10:40 - 11:00	BREAK		
11:00 - 11:20			
11:20 - 11:40			
11:40 - 12:00	**SESSION C1**	**SESSION C2**	**SESSION C3**
12:00 - 12:20			
12:20 - 12:40			

Closing Remarks: End of Day 02

CONFERENCE
PARALLEL
SESSIONS

International Conference on Sustaining Heritage:
Innovative and Digital Approaches

A1-A3

DAY 01: 18 JUNE 2023
SESSION A1 🕐 11:00 - 12:40

Moderator: Dr. Manal Khalaf | Co-Moderator: Mr. Motaz Mestarehi

Link to session: **Session A1**

1
The Sacred Perception of Lefebvre's Spatial Triad in the Architectural Heritage of Buddhist Temples

Minglan Zou; Azizi Bahauddin

2
Preservation of Interior Heritage Through Virtual Reality: Simulation of an Interactive Interior

Alena Semivolos; Muhammad Anshari

3
Reading the Urban Form and Spatial Heritage: A Case Study of Urban Villages in Bahrain

Wafa Al-Ghatam

4
Urban Canal Cultural Heritage Management Effectiveness Evaluation Through Multi-Source Data

Yinong LI; Lei CAO; Weifu GAO

5
Phenomenological Theories in Improving Visitors' Experiences for Heritage District in the Kingdom of Bahrain, Muharraq

Zainab Abdulhusain Mohamed

DAY 01: 18 JUNE 2023
SESSION A2 ⏰ 11:00 - 12:40

Moderator: Dr. Nikolas Patsavos | Co-Moderator: Mrs. Aysha Agha Shah

Link to session: Session A2

1 Investigating the Use of Capacity Building to Improve Egypt's World Heritage Site Management Effectiveness

Mahmoud Shaaban Abdelrahman

2 Environmentally Sustainable 3D Printed Earthen Structures for Heritage Architecture in Bahrain

Zainab AbdulMohsen Eid

3 Cybersecurity in the Heritage Tourism - A Bibliometric Analysis on Usage of UAV & Drones

Ashutosh Bhattacharya; Anam Fatma; Pankaj Pathak; Vimal Bhatt

4 Indonesia's Cultural Heritages Preservation: Knowing Wayang More Deeply

Raj Gaurang Tiwari; Saroja Kumar Rout; Anurag Kumar

5 Preservation and Conservation of the National Museum of Ras Al Khaimah Collection and Its Sustainability for Future Generations' Accessibility

Nagmeldeen Hamza

DAY 01: 18 JUNE 2023
SESSION A3 🕐 11:00 - 12:40

Moderator: Mrs. Aysha Agha Shah | Co-Moderator: Mrs. Anamika Jiwane

Link to session: **Session A3**

1

Machine Learning Models for the Classification of Heritage Sites to Enhance the Economic Growth through Tourism

Shagun Sharma; Kalpna Guleria

2

Aspects of Architectural Innovation in the Heritage of Al Ain (UAE)

Adriaan De Man; Boshra Hassan

3

Understanding the Perceived Terroir Product as an Intangible Cultural Heritage Element: Exploratory Approach from Consumers and Restaurateurs Standpoints

Karim Ben Yahia; Amira Trabelsi-Zoghlami ; Salma Ines Daou ; Soukeina Touiti

4

Current State and Future of Building Information Modeling for Sustainable Heritage Buildings

Abdullah O. Baarimah; Wesam Salah Alaloul; M. S. Liew; Aawag Mohsen Alawag; Mahmood A. Bazel; Fadi Alkhatib

5

Efficiency of Omnichannel Retail in Heritage Tourism using IoT

Harsh Khosa; Anam Fatma; Pankaj Pathak; Vimal Bhatt

B1-B3

CONFERENCE

PARALLEL
SESSIONS

International Conference on Sustaining Heritage:
Innovative and Digital Approaches

DAY 02: 19 JUNE 2023
SESSION B1 🕐 9:00 - 10:40

Moderator: Dr. May Khalfan | Co-Moderator: Mr. Nazish Abid

Link to session: **Session B1**

1

Exploring Modern and Technological Approaches for Preserving and Promoting Urban Tangible Heritage

Hala Lenghi

2

The Aspects of Authenticity in the Digitalization of Cultural Heritage: A Drifting Paradigm

Mohammad Saad Hanif Haji

3

Deep Learning Architect: Classification for Architectural Design Using Artificial Intelligence

Naresh Kumar Trivedi; Raj Gaurang; Vinay Gautam Tiwari; Anshbir Singh

4

An Application of MRCNN Model for Hemispherical Domes Recognition in India Heritage Monuments

Vinay Kukreja; Deepak Kumar

5

Digital Documentation as a Tool for Heritage Conservation: Insights from the Frere Hall, Karachi, Pakistan

Ayesha Agha Shah

1

Meaningful Communication of Museum Artifacts through the Integration of Digital Features into Physical Replicas

Eslam Nofal; Mohamed Waheed Fareed; Monther Jamhawi

2

Utilizing Digital Documentation of Dinoyo Ceramics Heritage as an Online Learning Communication Media

Faishal Hilmy Maulida; Andrew MC Kenzie; Estherin Vania Holly; Ahmad Fathoni Ambia; Mery Katherin Wijaya

3

Kentrung: Implementation of Cultural Heritage Preservation Through Learning as A Media for Integrative Language Learning

Gamal Kusuma Zamahsari; Sahrul Romadhon

4

Offline Handwritten Gurmukhi Word Recognition System for Tehsil and Sub-Tehsil names of Punjab using Bi-LSTM Network

Bhavna Sareen; Rakesh Ahuja; Amitoj Singh

5

Ancient Manuscript Recognition for Devanagari Text Using INCEPTIONRESNETV2 Transfer Learning Model

Saravjeet Singh; Aditi Moudgil

6

The Historical and Heritage Values Embodied in Arabic Calligraphy Art

Duaa Mohammed Alashari

DAY 02: 19 JUNE 2023
SESSION B3 🕐 9:00 - 11:00

Moderator: Dr. Nada Megahed | Co-Moderator: Dr. Hawra Al Shaikh

📧 Link to session: **Session B3**

1 A Review of the Consequences of Social Media Usage and the Mediating Role of Technology-based Customer Engagement in Heritage Tourism

Anam Fatma; Vimal Bhatt

2 Building Information Modelling (BIM) with Digital Twin for the Sustainable Management of Smart City & Building Preservation: A Literature Review

Muhammad Anshari; Syamimi Ariff Lim; Alena Semivolos

3 Digital Management for Sustainable Tourism: a Bibliometric Review

Dwi Kartikasari; Mohammad Nabil Almunawar; Muhammad Anshari; Wardah Hakimah Haji Sumardi

4 Predicting the Economic Capabilities and Opportunities of Sport Tourism in Bahrain

Saeed Hameed Aldulaimi; Marwan M. Abdeldayem; Mohammed Yousif Abo Keir; Abdulsattar Alazzawi

5 Trip Generation Analysis on Calle Crisologo, Vigan City in the Promotion of Sustainable Tourism

Thea Shane P. Sorolla; John Exequiel B. Canda; Brian Dominic J. Rabino

6 The Preservation and Enhancement of Tunisia's Cultural Heritage: Integration of Digitalization and Innovative Techniques

Karim Ben Yahia; Fedia Bouslama

C1-C3

CONFERENCE

PARALLEL
SESSIONS

International Conference on Sustaining Heritage:
Innovative and Digital Approaches

DAY 02: 19 JUNE 2023
SESSION C1 🕐 11:00 - 12:40

Moderator: Prof. Islam El Ghonaimy | Co-Moderator: Mrs. Wafa Alghatam

Link to session: **Session C1**

1

FinTech in Tourism and Cultural Heritage for a Sustainable Economy: A Literature Review

Egi Arvian Firmansyah; Masairol Masri; Muhammad Anshari; Mohd Hairul Azrin Besar

2

A New Approach for Classification and Detection of World Cultural Heritages with YOLOv3

Mert Çeçen; Mehmet Karaköse

3

A New Classification Approach for Cultural Heritages Using Deep Learning Based Image Recognition

Serhat Ataş; Mehmet Karaköse

4

Inclusivity in Jordan's Cultural Historic Sites: Examining Policy and Practices

Aseel AlJaafreh; Vanja Gara; Youngok Choi

5

Enhancing Construction Management In Restoration Through BIM-Assisted Photogrammetric 3D Model Accuracy Assessment

Syed Saad; Syed Ammad; Kumeel Rasheed; Mohammed Balbehaith; Abdul Hannan Qureshi; Muhammad Tariq Bashir

DAY 02: 19 JUNE 2023
SESSION C2 🕐 11:00 - 13:00

Moderator: Dr. Asma Ayari | Co-Moderator: Mr. Weldy Eka Saputra

Link to session: Session C2

1

Applications of Heritage Building Information Modeling (HBIM): A Bibliometric Review and Future Trends

Abdullah O. Baarimah; Khalil Idrissi Gartoumi ; Wesam Salah Alaloul ; M. S. Liew ; Aawag Mohsen Alawag ; Mahmood A. Bazel

2

Strengthening Commitment to Implementation of Islamic Finance Law in Preserving Islamic Intangible Heritage in Aceh, Indonesia

M. Shabri Abd. Majid; Maulana Kamal; Maulidar Agustina

3

Batik Classification in Indonesia: Exploring its Significance on Tourism and Economy

Raj Gaurang Tiwari; Ambuj Kumar Agarwal; Vishal Jain; Anurag Kumar

4

Systematic Literature Revie: A Conceptual Design Model of Smart Village

Muhammad Ilham Alhari; Muharman Lubis ; Luthfi Ramadani

5

Incorporating the Applications of Building Information Modeling Technology in the Sustainable Retrofitting of Heritage Buildings: A Systematic Review

Aawag Mohsen Alawag; Wesam Salah Alaloul; M.S. Liew; Eman Ali Al-awag; Abdullah O. Baarimah; Mazen M. Omer

6

Chat with ChatGPT: Access to cultural heritage with ChatGPT

Merve Yilmazer; Mehmet Karakose

Link to session: Session C3

1

Deep learning-Based Comic Recognition and Analysis for the Preservation of Indigenous Intangible Heritage

Rishabh Sharma; Vinay Kukreja

2

Education Partnership with Cultural Heritage: Digital Solutions

Hessa AlAtawi; Hajar Mahfoodh; Asma Hasan; Shamsina Mohamed Ebrahim

3

Heritage Coins Classification: An Federated CNN Approach to Analyse Performance of Global and Client-side Models

Shiva Mehta; Vinay Kukreja

4

E-Learning in Cultural Heritage: A Bibliometric Analysis

Wail M. Matran; Mazli Mustapha; Mohd Faizairi Nor; Abdullah O. Baarimah; Aawag Mohsen Alawag ; Abdullah S. Almaari

5

The Creative Implications of Photogrammetry in Museum Experience

Tamadhar Alfahal; Mohamed Alaabar

6

Culture-Architecture Debate: Understanding Aesthetics and Immateriality

Hawra Jaafar Shaikh Mansoor

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