# Table of Contents

Message from Conference Chairs ................................................................. x
Conference Organization .................................................................................. xi
Program Committee .......................................................................................... xii
External Reviewers .......................................................................................... xiv

---

## Keynote Talk
Music Cultures Opened Up by Music Technologies ........................................... 1
*Masataka Goto*

## Invited Talk
Antoni Gaudí and His Role in Forming a Traditional Craft and Digital Culture
Continuum ........................................................................................................... 3
*Mark Burry*

## Session 1: Art and Design by Information Technologies
How to Pay Attention to the End of Our Life: An Interactive Installation
in Cultural Computing ......................................................................................... 10
*Kiarash Irandoust and Matthias Rauterberg*
Projection Mapping Celebrating RIMPA 400th Anniversary .................................. 18
*Naoko Tosa, Ryohei Nakatsu, Pang Yunian, and Kosuke Ogata*

## Session 2: VR and Agents in Culture
Perception of Affective Body Movements in HRI across Age Groups:
Comparison between Results from Denmark and Japan .................................... 25
*Matthias Rehm, Anders Krogsager, and Nicolaj Segato*
Modeling and Evaluating a Bayesian Network of Culture-Dependent Behaviors .................. 33
*Birgit Lugrin, Julian Frommel, and Elisabeth André*
"Third-Person" Augmented Reality-Based Interactive Chinese Drama ........................................41
Yanxiang Zhang and Abassin Fangbemi

Visual Point-Based Analysis of Laser-Scanned Historical Structures .....................................47
Wang Sheng, Atsushi Okamoto, and Satoshi Tanaka

Painting Based Enterable Tunnel-Like VR Space .................................................................54
Yanxiang Zhang

**Session 3: Open Data for Culture and Computing**

Comparing the Access to and Legibility of Japanese Language Texts in Massive Digital Libraries .................................................................57
Andrew Weiss and Ryan James

A Computational Model for Conversational Japanese ..........................................................64
Peter L. Ihasz, Timothy H. Van, and Victor V. Kryssanov

**Session 4: Digital Storytelling**

Accessing Cultural Artifacts through Digital Companions: The Effects on Children's Engagement .................................................................72
Matthias Rehm and Martin Lynge Jensen

Indigenous Storytelling in Namibia: Sketching Concepts for Digitization .............................80
Kasper Rodil and Heike Winschiers-Theophilus

Intuitive Curve Drawing Based Folktale Generator .............................................................87
Yanxiang Zhang, Thuy Duong Tran, and Abassin Fangbemi

An Example of Collaborative Online Writing in the Italian Language: "The Incipit" .................................91
Gabriele Rebagliati

**Session 5: Culture in Social Networks**

Cultural Networks and the Future of Cultural Analytics .......................................................95
Juan-Luis Suárez, Ben McArthur, and Adriana Soto-Corominas

Ranking Recipes According to Classicality towards Understanding Evolution of Food Preference .................................................................99
Yichen Wen, Yasuhito Asano, and Masatoshi Yoshikawa

Capturing Sub-Saharan African Sociality in Social Networks to Generate a Culturally Realistic Population .................................................................107
Colette Faucher, Jean-Yves Bergier, and Mathilde Forestier

An Examination of the Culture of Impartiality in Wikipedia, A Case Study of the Islamic World Representation in the English and Persian Versions of the Wikipedia .................................................................113
Somayeh Bahrami, Mojtaba Touiserkani, and Majid Reza Momeni
One Touch Character: A Simplified Japanese Character Input Method for Mobile Computing ......................................................... 119
  
  Masanobu Higashida, Toru Ishida, Jin’ichi Murakami, and Masahiro Oku

Session 6: Intercultural Communication and Collaboration

The Use of Formal English Language and ICT Input Sources among Japanese University Students .................................................. 127
  
  Jeremy White and Peter Lajos Ihasz

Intercultural Communication Environment for Youth and Experts in Agriculture Support ............................................................ 131
  
  Toshiyuki Takasaki, Yohei Murakami, Yumiko Mori, and Toru Ishida

Subjective Interpretation of Directive Terms: Methodology and Preliminary Results ................................................................. 137
  
  Christopher K. Frantz, Swetha Keertipati, Martin K. Purvis, and Maryam Purvis

Evaluation of the Validity of Back-Translation as a Method of Assessing the Accuracy of Machine Translation ...................................... 145
  
  Mai Miyabe and Takashi Yoshino

Session 7: Information Environments for Analysis of Culture

Content Sharing in Global Brand from Geographic Perspective ................................................................. 151
  
  Amit Pariyar, Yohei Murakami, Donghui Lin, and Toru Ishida

A Proposed Cultural Difference Detection Method Using Data from Japanese and Chinese Wikipedia .............................................. 159
  
  Takashi Yoshino, Mai Miyabe, and Tomohiro Suwa

Organized Session: The City's Intangible Cultural Heritage

Hybrid Cemetery Culture: Making Death Matter in Cultural Heritage Using Smart Mobile Technologies ...................................... 167
  
  Jakob Borrits Sabra, Hans Jørgen Andersen, and Kasper Rodil

Building a Gamified System for Capturing MOOC Related Data: Smart City Learning Community as its Most Precious Source of Intangible Cultural Heritage ........................................................... 175
  
  Ljiljana Markovic and Adam Sofronijevic

Preserving Heritage through Technology in a City Undergoing Change ..................................................................................... 183
  
  Mathias Lyneborg Damgaard, Seth Van Heijster, Emil Byskov Nielsen, Kasper Rodil, and Matthias Rehm
Poster Session

Visual Arts for Reading the Original Texts of Makura no soshi and Tsurezuregusa ..............................................................................................................................................187  
Yasuhiko Saito

Urban Archiving for Smarter Cities: Archival Practices beyond Open Data ..................................................189  
Elisabet M. Nilsson and Veronica Wiman

Clustering Word Co-occurrences with Color Keywords Based on Twitter Feeds in Japanese and German Culture .............................................................................................................191  
Daniel Moritz Marutschke, Sasha Krysanova, and Hitoshi Ogawa

New Approach of Cultural Aesthetic Using Sound and Image ...........................................................................193  
Yunian Pang and Naoko Tosa

Gender Stereotypes in Cultures: Experimental Investigation of a Possibility of Reproduction by Robots in Japan ..............................................................................................................................................195  
Tatsuya Nomura and Yuto Kinoshita

High-Realistic Acoustic Sound Field Reproduction with 16ch Head-Enclosed Loudspeaker-Array for Gion Festival Music ..................................................................................................................197  
Kota Nakahashi, Takahiro Fukumori, Masato Nakayama, and Takanobu Nishiura

Virtual Show, Go In!: Walk-Through System and VR Goggles of a Temple for Museum Exhibits .................................................................199  
Asako Soga

Character Image Database of Woodblock-Printed Japanese Historical Book Images .................................................................................................................................................................................................201  
Chulapong Panichkriangkrai, Liang Li, Keiko Suzuki, Ryo Akama, and Kozaburo Hachimura

Paper Analysis and Database of Papers of the Pelliot Collection, Dunhuang Manuscripts ................................................................................................................................................................................203  
Shouji Sakamoto and Yoshihiro Okada

An Approach to Named Entity Extraction from Mongolian Historical Documents ............................................205  
Biligsaiikhan Batjargal, Garmaabazar Khaltarkhuu, and Akira Maeda

Personal Name Extraction from Japanese Historical Documents Using Machine Learning .................................................................207  
Noriyoshi Nagai, Fuminori Kimura, Akira Maeda, and Ryo Akama

Measurement of Unevenness of Korean Printed Books .........................................................................................209  
Kim Heakyoung

Multiplying the Narrative .........................................................................................................................................211  
Elke E. Reinhuber
Demonstration Session

A Data-Visualization Tool for Analyzing Ukiyo-e's Pictorial Themes ......................................................... 213
  Keiko Suzuki and Shinya Saito

Multiagent Gaming System for Multilingual Communication ................................................................. 215
  Yuu Nakajima, Reiko Hishiyama, and Takao Nakaguchi

Developing Digital Hall of Prayer for Good Harvest Software to Promote Historical Culture by Applying Virtual Reality Technology ................................................................. 217
  Zhaoxi Ni and Zhiqiang Gao

An Image Digital Archive for Substantiating the Acculturation of Clothing Culture in Japan ................................................................. 219
  Haruko Takahashi

Author Index .............................................................................................................................................. 221