



VizAfrica 2018 Visualization Symposium

August 20th-21st, 2018, JKUAT Juja (Main Campus), IPIC Building

PROGRAMME

Day 1: August 20, 2018		
08:00 – 09:00	Registration	
09:00 – 10:30	Official Opening	
Venue: Room 1	Master of Ceremony: Prof. Margaret Oloko - JKUAT	Rapporteur: Dr. John Kinyuru – JKUAT
Welcome Remarks		
<ol style="list-style-type: none"> 1. Prof. Muliaro Wafula, Director iCEOD, JKUAT & Chairman – Symposium Organising Committee 2. Prof. Mary O. Abukutsa-Onyango - DVC (RPE), Jomo Kenyatta University of Agriculture and Technology (JKUAT) 3. Prof. Victoria Wambui Ngumi - Vice Chancellor, Jomo Kenyatta University of Agriculture and Technology (JKUAT) 		
Official Opening		
Mr. Francis Wangusi, Director General Communication Authority of Kenya, Chief Guest		
10:30 – 11:00	Tea Break/Exhibitions/Poster Presentations	
11:00 – 13:00	Room 1: Keynote Speeches Session	
Venue: Room 1	Chair: Prof Stephen Kimani – Director SCIT, JKUAT	Rapporteur: Dr. John Kinyuru – JKUAT
Author(s)		Title
1. Prof. Xiaoru Yuan - Peking University, Beijing, China		Data Visualization for Everyone
2. Adrian van der Knaap - World Food Programme (WFP)		How improved supply chain concepts and mechanisms can trigger an agricultural revolution in sub-saharan Africa
3. Prof. Koji Koyamada - Kyoto University, Japan		Data visualization for better understanding of causality
13:00 – 14:00	Lunch Break/Exhibition/Poster Presentation	

14:00 – 17:30	Track 1: Computer Graphics, Media Animation, Manufacturing and Industry	
Venue: Room 1	Chair: Prof Benjamin Aribisala, Lagos State University	Rapporteur: Dr. Geoffrey W. Chemwa, JKUAT
Author(s)	Title	
1. Stephen Obare, George Okeyo, Abejide Ade-Ibijola, Kennedy Ogada – JKUAT, Kenya	Automatic Comprehension of Tweets Using Jumping Finite Automata	
2. Lei Puwen - Kyoto University, Japan	Interactive Visualization System of Precipitation's Probability by Using Percentage Area Graph	
3. Francis Kimani Njoroge - Department of Computing, JKUAT, Kenya	Forecasting Cancellation of Hotel Bookings Using Ensemble Machine Learning Models	
4. Patrick O. Ajwang – JKUAT, Kenya	Separation of Overlapping Image Objects Using Morphological Operations	
5. Constance M. Ngila and Catherine W. Wangari - JKUAT, Kenya	Color Impact on the Perception of the Emotions Portrayed in 3D Animations	
16:00 – 16:30	Tea Break/Exhibitions/Poster Presentations	
6. Yuki Ueno - Kyoto University, Japan	Classification of task performance during an evaluation of visualization method based on physiological signals	
7. Sarah Waiganjo , Muliaro Wafula, Simon Karanja - JKUAT, Kenya	Realtime DHIS2 Data Capture, Integration and Operability as a Potential Driver towards Health Data Analytics, Health Intelligence and Visualisation for Mother Child Health Data in Kenya	
8. David S Ongoma, Muliaro Wafula and Tobius Mwalili – JKUAT, Kenya	A Log-Polar Mapping Approach to Copyright Protection of Video Data	
14:00 – 17:30	Track 2: Logistics, Supply Chain Management, Policy Regulation and Strategic Management	
Venue: Room 2	Chair: Prof Margaret Oloko - JKUAT	Rapporteur: Dr. Samuel Muli - JKUAT
Author(s)	Title	
1. Abdalla Zaman, SOLVE	Positioning SOLVE towards efficient and effective supply chain management	
2. Irene Kimani, JM Wafula and AN Mindila – JKUAT, Kenya	Visualization of Agricultural Research Information Accessed via Mobile Applications for Policymakers: Case of KALRO	
3. Wambui Waithaka – JSI	Making data usable and actionable: transforming DHIS2 data into analytics for improving supply chain performance and efficiency in 10 counties in Kenya	
4. Mwirigi Kiula, Esther Waiganjo, John Kihoro – JKUAT, Kenya	The Role of Leadership in Building the Foundations for Data Analytics, Visualization and Business Intelligence	
16:00 – 16:30	Tea Break/Exhibitions/Poster Presentations	
14:00 – 17:30	Track 3: Agriculture, Food and Nutrition Security	
Venue: Room 3	Chair: Prof John Wesonga – JKUAT	Rapporteur: Dr. Cornelius M. Wainaina - JKUAT
Author(s)	Title	
1. Hartmut Stützel – LUH, Germany	Application of data analytics and visualization in agriculture, food and nutrition	
2. Makara Loise, Kennedy Ogada , Dennis - JKUAT, Kenya	Interactive Data Visualization Tools and Techniques for Multidimensional Agricultural Data	
3. Ndung'u J. W., Kinyuru J. N, and Chege P. M. – JKUAT, Kenya	Nutritional potential of edible insects: A systematic review of published data from online databases	
16:00 – 16:30	Tea Break/Exhibitions/Poster Presentations	
4. Irene W Kimani, J M Wafula and AN Mindila – JKUAT, Kenya	Building resilience on food security and nutrition through Open Data	

5. Naomi C. Ketter, John M. Wesonga, Hartmut Stützel – LUH, Germany	Can weather data be used to schedule irrigation of African leafy vegetables?
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Day 2: August 21, 2018

08:00 – 08:30	Registration	
08:30 – 10:30	Keynote Speeches	
Venue: Room 1	Chair: Prof. Koji Koyamada - Kyoto University	Rapporteur: Dr. Agnes Mindila - JKUAT
Author(s)		Title
1. Prof. Benjamin Aribisala - Lagos State University, Nigeria		Africa Open Science Platform and Medical Application of Data Visualisation
2. Joel Onditi - Pathways International, USA		Data and Information Visualization as a tool for harnessing Business Intelligence
3. Prof Anthony Rodrigues - JAOUST, Kenya		National Spatial Data Infrastructure and Sustainable Development: A Kenyan Perspective
4. Prof Satoshi Tanaka - Ritsumeikan University, Japan		Visualization of Tangible Cultural Heritages based on Digitally Archived Data
10:30 – 11:00	Tea Break/Exhibitions/Poster Presentations	
11:00 – 13:00	Track 1: Computer Graphics, Media Animation, Manufacturing and Industry	
Venue: Room 1	Chair: Prof. Liang Li - Ritsumeikan University, Japan	Rapporteur: Harriet Ratemo - JKUAT
Author(s)		Title
9. Lincoln Kamau, Philip Kibet, Christopher Maina, Robert Macharia – JKUAT, Kenya		A method for Extracting Data Points from an Image of a Plotted Graph
10. Nozomi Aoyama Yuki Ueno, Koji Koyamada - Kyoto University, Japan		A computational evaluation of eye-track measures in Group-in-A-Box
11. Ikuya Morimoto, Satoshi Nakada, Kyoko Hasegawa, Liang Li, Satoshi Tanaka - Ritsumeikan University, Japan		Visualization of tsunami simulation data using multi-dimensional transfer functions in HSV A color space
12. Geoffrey Wekesa Chemwa – JKUAT, Kenya		A Big Data Analytics and Visualization Model for Enhancing Security Within Smart Cities: A Case Study of Nairobi Metropolitan Area
13. Benard Sabwa		Driving Behaviour Analysis Based on Vehicle OBD II Information and Location Analytics
14. Michael S. Wafula and Joseph J. Musakali - Moi University, Kenya		The Psychological Perception of Matatu Graffiti on Passenger Attraction
11:00 – 13:00	Track 2: Logistics, Supply Chain Management, Policy Regulation and Strategic Management	
Venue: Room 2	Chair: Mr Adulla Zaman, SOLVE	Rapporteur: Dr. Boniface M. Kiula - JKUAT
Author(s)		Title
1. Amos O. Omamo , Anthony J. Rodrigues and Muliaro Wafula - Jaramogi Oginga Odinga University of Science & Technology, Kenya		Generic (meta)/Systems Dynamics model for sustainable development in Kenya Governance, Society, Technology and Economics
2. Dennis Ndwinga – KEMSA, Kenya		Advancing Multi-Disciplinary Data, Information and Scientific Visualization for Strategic and Sustainable Development
3. Mogire Obwaya and Muliaro Wafula - iCEOD, JKUAT		Mapping Africa Union Initiatives Using Visualization Tools for Policy Makers

11:00 – 13:00	Track 4: Universal Healthcare	
Venue: Room 3	Chair: Prof Fred Wamunyokoli – JKUAT	Rapporteur: Prof. Titus Kikuvi - JKUAT
Author(s)		Title
1. K. Rombosia, E. Oele N. Rangara, C. Akoth J. Mwaura, B. Mitto, E. Ondura and D. Onyango, – JKUAT, Kenya		Effects of health facilities location on skilled deliveries in achieving universal healthcare in Kisumu County, Kenya
2. Mwirigi Kiula and Caroline Chege – JKUAT, Kenya		Identification of the Limitations of Health Care Insurance Industry ERPs on Business Intelligence using QlikView
3. C. Akoth J. Mwaura – JKUAT, Kenya		Innovative Technology to support HIV prevention and treatment in Siaya County
4. Mwirigi Kiula and Caroline Chege – JKUAT, Kenya		Application of Data Visualization for Improved Health Care Insurance Management using QlikView
Lunch Break		
14:00 – 15:30	Track 1: Computer Graphics, Media Animation, Manufacturing and Industry	
Venue: Room 1	Chair: Prof Satoshi Tanaka - Ritsumeikan University- Japan	Rapporteur: Mr. Phillip Oyier - JKUAT
Author(s)		Title
1. Joel Onditi, Stephen Barry Okwaro, Kennedy Kwambai and Loise Makara		Revolutionizing the Manufacturing Industry using the Business Intelligence Technology
2. Khadiala Ligono Lisah		A GIS Based Intelligent Transportation System for Traffic Incident Management
3. Ting Wang - Kyoto University, Japan		Visual Analytic System for Dynamical Network Exploration with Empirical Dynamic Modelling
4. Weite Li, Kenya Shigeta, Kyoko Hasegawa, Liang Li, Motoaki Adachi and Satoshi Tanaka -Ritsumeikan University, Japan		Collision Visualization of Laser-scanned Point Clouds
5. Jacqueline Okeyo, Xiany Yang, Meiyang Wang - University of Technology, China		A brief Review on Advancing Multi-disciplinary Data in Computer Graphics, Media and Animation For Strategic and Sustainable Development in Kenya
14:00 – 15:30	Track 2: Logistics, Supply Chain Management, Policy Regulation and Strategic Management	
Venue: Room 2	Chair: Prof. Karanja Kabare – JKUAT	Rapporteur: Ms Irene Kimani - JKUAT
Author(s)		Title
15. Stephen Ogenga and Muliaro Wafula -- JKUAT, Kenya		Visualization the Gap Analysis of Skill Audit for the Northern Corridor Integration Project
16. Agnes Mindila and Muliaro Wafula		Vaccine Stock Management System Dynamics Model

09:00 – 17:30	Track 5: Poster Presentations (Day 1 & 2)	
Venue: Foyer	Chair: Dr Agnes Mindila - JKUAT	Rapporteur: Mr. Daniel Wainaina - JKUAT
Author(s)	Title	
1. Agnes Mindila, Kevin Korir and Muliaro Wafula – JKUAT, Kenya	Geofenced Blood Donation Support Mobile Application	
2. Agnes Mindila, Oremo, Hariet Ratemo, Muliaro Wafula and Robert Kinyua - – JKUAT, Kenya	MazingiraApp on Realtime air quality monitoring in JKUAT	
3. Muliaro Wafula, Agnes Mindila, Pascal Ouma, Teresia Kariuki and D Adongo – JKUAT, Kenya	Light Videos for Smart Learning Class 8 Mathematics in Kenya	
4. Sarah Nyarugu Waiganjo, Muliaro Wafula and Simon Karanja – JKUAT, Kenya	Analysis and Visualization of Children Vaccination DHIS2 Data using Realtime DHIS2 Tool	
5. Andrew Simiyu, Muliaro Wafula and John Wainaina – JKUAT, Kenya	CrimeAlert application	
15:30 – 16:00	Tea Break	

16:00 – 17:00	Plenary Session, Way forward and Closing Ceremony	
Venue:	Chair: Prof. John M. Wesonga - JKUAT	Rapporteur: Dr. John Kinyuru
Presentations of summaries from Tracks/Sessions <ol style="list-style-type: none"> 1. Computer Graphics, Media Animation, Manufacturing and Industry 2. Agriculture, Food and Nutrition Security 3. Universal Healthcare 4. Logistics, Supply Chain Management, Policy Regulation and Strategic Management Presentation of overall summary and way forward <ul style="list-style-type: none"> • Prof. Muliaro Wafula - Director iCEOD, JKUAT & Chairman – Symposium Organising Committee Official closing speech <ul style="list-style-type: none"> • Prof. Hamadi Iddi Boga - Principal Secretary, State Department of Agriculture Research, Chief Guest Vote of Thanks <ul style="list-style-type: none"> • Prof Waweru Mwangi – JKUAT 		