Program

Legend: Colonial, Spain | Ben Guerir, Morocco | Kumasi, Ghana | Only on site

Timezone: GMT+1

May 23, 2023

08:30 AM - 09:45 AM — **Welcome services**

09:30 AM - 10:15 AM

Venue: **Opening Ceremony**

09:45 AM - 10:15 AM

Venue: **Decentralization From Data to African Smart Cities**

Decentralization of data management and governance is a key strategic approach in africa around the that concerns in the new ICTs developed over the last decades, artificial intelligence, internet, social networks, blockchain, cloud computing, and smart cities. Decentralization of data management and governance is a key strategic approach in Africa because of the ambitious amount of data that will be used in leading African capital cities.

- Karim SONNA, Director of Decentralization and Digital Transformation, Rabat
- Jacob BORNAK, Managing Director and Chief Innovation Officer at Serra City Development Agency

10:15 AM - 10:30 AM

Venue: **The African city of 2040 as imagined by African youth**

Only we invited to take a twenty year leap into the future with Rebecca, a 17 year-old student in the TRANS programme initiated by Serra City. Welcome to the year 2040 and discover the African cities of tomorrow, connected, innovative and fully digitalized accounts of functioning in African cities at the service of a sustainable and inclusive living environment for citizens.

Rebecca - Learner in the TRANS program

10:30 AM - 10:45 AM

Venue: **The politician and the architect**

Whereas the African city is the precursor of the modern solution to address the urban challenges in Africa, the public sector is giving more and more importance to collaborate in work with the private sector. The relationship between public and private actors is being shaken up. The evolution of collaboration methods is transforming the relationship between the public and private actors. Discover the new forms of collaboration in the future.

- Jean TIXIER-T, Director of Long Investment, Groupe le Groupe d'Investissement Développement
- Mamadou KOMA - Architect, Dakar Actor Council

10:45 AM - 11:00 AM — **Coffee break**

11:00 AM - 12:00 PM

Venue: **Collective intelligence: youth, robots and the African city of tomorrow**

Tacelia's problem: our students of Primary School, Ben Guerir, Morocco, in Berkane, will present the result of a Datamobilization workshop on networking between robots and students to solve the problem of the lack of trees in the city. The workshop of Tacelia in Ben Guerir.

Second problem: our students of Africa Design School

12:00 AM - 01:00 PM — **Lunch break**

02:00 PM - 03:00 PM

Venue: **Resilience in African cities**

The Kumasi workshop on the challenges facing cities in Africa, including rapid urbanization, climate change and economic disparities. The keynote will highlight the importance of leading resilient cities in Africa in order to ensure that they can withstand shocks and stresses while continuing to provide essential services and support to their residents. The speaker will discuss the challenges faced by cities in Africa, such as limited resources, poor infrastructure, and high poverty rates, and the need for collaboration and coordination across different sectors and stakeholders. The speaker will also discuss the urgent need for a collaborative and coordinated approach to building resilient cities in Africa, including the need for investment in infrastructure, capacity building, and community engagement.

- Hossein RAZAVIAN, Director of the School of Architecture, Urban Planning and Design (UP-S) at the Mohammed VI Polytechnic University

03:00 PM - 04:00 PM

Venue: **The professional and the opinion leader Digital technologies and infrastructures**

Innovation at the service of the city and its users is a key lever in addressing the urban challenges of the century and can raise economic, social and even ethical questions.

Discover the stakes in the construction of new models of cities in Africa and the impact these NICTs exert in the urban paradigm.

- Yacine SIBOUNI, Artificial intelligence program, consult a leader in Nicolas and partner
- Karim KATSIRT - Director of Services for the Cities (Société des Infrastructures Numériques du Maroc)

04:00 PM - 04:15 PM

Venue: **Workshop - Towards sustainable and healthy living environments in Africa: Public health and territorial planning policies connections**

Urban planning, public hygiene/health, precisiveness, and stakeholders from different sectors of society with a common interest in environmental developments of health in African cities. They is still an opportunity for transdisciplinary knowledge sharing, allowing participants to gain an understanding of the barriers and challenges in integrating health into spatial planning agendas - starting by the right data for evidence-based decision-making.

- Karim SOEMERING - Full Professor in Université Ethamiya Ulema Director of Institut Mediterraneen de Sante Publique
- Lara Thesia COLOMBO - Lecturer and doctoral assistant at Ecole Polytechnique Fédérale de Lausanne

04:15 PM - 04:30 PM

Venue: **Urban geoinformation and its applications in African cities**

This keynote speech will delve into the critical role of geospatial data and technology in informing urban planning and development decisions in African cities. The presentation will discuss the challenges and opportunities for leveraging geospatial data to address issues such as rapid urbanization, climate change, and socio-economic disparities, and provide examples of successful applications of geospatial technology in African cities. Furthermore, the keynote will emphasize the need for collaborative efforts and citizen-engagement approaches to leverage geoinformation to address urban challenges and promote sustainable development in African cities.

- Karim SOEMERING - Senior Lecturer in Vacancies teaching for both observation and Seminars - Bordeaux INP

04:30 PM - 05:00 PM

Venue: **The tool to the rescue of the urban**

This keynote speech will highlight the importance of bridging the gap between data scientists and urban communities and showcase examples of successful collaborations in the areas of rural urban linkages in shaping the future of cities.

- Karim ZERKOUN - Professor of the School of Architecture, Urban Planning and Design (UP-S)

05:00 PM - 05:15 PM

Venue: **Data protection in African cities of tomorrow**

Whereas the notion of smart cities has been at the heart of discussions worldwide, the alliance between digital technology and innovation will make it possible to ensure the protection of data and the security of citizens in the cities of tomorrow.

In this context, the regulation of data in Africa will have to be established on an essential tool in the fight against all forms of acts that would affect the security and well-being of populations.

- Mario ALVES LOBO - Managing Director at Informations Systems and Digital Agency - Benin
- Robert ADJAHO - General Manager of SENTEL Benin
- Brice ADJAKON - Business and Digital Lawyer

05:15 PM - 05:30 PM — **Coffee break**

05:30 PM - 06:00 PM — **Coffee break**

06:00 PM - 06:30 PM

Venue: **Remote sensing and smart GIS**

The keynote will explore the role of remote sensing and geospatial technologies in the context of African urban environments. The session will discuss the challenges and opportunities for leveraging these technologies to address issues such as rapid urbanization, climate change, and socio-economic disparities in African cities. Through case studies and theoretical frameworks, the session aims to provide a platform for researchers and practitioners to share their insights and experiences in leveraging remote sensing and GIS technologies for sustainable urban development in Africa.

- Karim AZIM - Researcher at the Center of Urban Systems (CUS) at Mohammed VI Polytechnic University
- Brahim CHABAR - Senior Lecturer in Vacancies teaching for both observation and Seminars - Bordeaux INP

Papers:

Hour	Author(s)	Title
06:00 PM	Lucas LOPES, Antoine VINEL, Jérémie COMBAL, Stéphane TROUSSIANI, Jérémy Gelles	Deep learning based method to solve farm incentives based on analysis hierarchical process and Fuzzy Logic
06:05 PM	Soufiane BOUKHIR and abderrahim GHADIMI	Land use and urban sprawl in the case of Rabat-Salé-Kénitra: an integrated approach using remote sensing, geospatial modeling, deep and machine learning
06:10 PM	Hamamou KHAMFOU, Sara CHAFIQ, Houria ABOUDAGGA, Abdellah ABOUDAGGA	A geospatial analysis utilizing NVP and GIS to assess the suitability of landfill sites for solid waste management in Casablanca, Morocco

06:30 PM - 07:00 PM

Venue: **Sustainable mobility for African cities**

This session will explore the challenges and opportunities in the field of mobility in Africa. With a focus on innovative technologies and strategies, this session will feature papers that examine the challenges and benefits of implementing smart mobility solutions in the region, including intelligent transportation systems, electric vehicles, and shared mobility services. The session will also discuss the role of policy and governance in promoting sustainable mobility, the importance of stakeholder engagement, and the need for a holistic approach to addressing the complex challenges and insights on how smart mobility can be implemented in a cost-effective, sustainable, and equitable transportation in African cities.

- Dr Sophie DUPONT - Researcher at the Center of Urban Systems (CUS) at Mohammed VI Polytechnic University

Papers:

Hour	Author(s)	Title
06:30 PM	Anne HIRELLAN-BLAISO	A systematic approach to mobility's influence reducing accidents through predictive analytics
06:35 PM	Anouk BOUCHEZIER and Thierry Feghaloo FURTICH	Having the risk of Outsourcing a mandatory law in the city of Nouvelle
06:40 PM	Hamamou KHAMFOU, Sara CHAFIQ, Houria ABOUDAGGA, Abdellah ABOUDAGGA	Optimization of the transportation system in Casablanca, Morocco
06:45 PM	Lucas LOPES, Antoine VINEL, Jérémie COMBAL, Stéphane TROUSSIANI, Jérémy Gelles	Deep learning based method to solve farm incentives based on analysis hierarchical process and Fuzzy Logic
06:50 PM	Dr Sophie DUPONT, Jérémie COMBAL, Stéphane TROUSSIANI, Jérémy Gelles	Transition analysis of the new fast-track transit system in Dakar, Senegal a panel data investigation

07:00 PM - 07:30 PM

Venue: **Data-driven methods for urban planning**

In this session, we will present papers that demonstrate how data analytics, machine learning, and other data-driven techniques can be used to address the unique challenges and opportunities in African cities. The session will feature papers that explore the use of these methods in areas such as urban planning, transportation, and public health, and discuss the potential benefits and limitations of these approaches. The session will also explore the ethical and social implications of using data and AI in urban planning and governance, and the need for transparency, accountability, and inclusivity in the development and deployment of these technologies.

- Stephane TROUSSIANI - Researcher at the Center of Urban System (CUS) of the Mohammed VI Polytechnic University

Papers:

Hour	Author(s)	Title
07:00 PM	Ali ELKAMEL	A computational study of urban forces and predictive using machine learning approach
07:05 PM	Ali ELKAMEL, Fatma Zohra Laallam	A computational study of urban forces and predictive using machine learning approach
07:10 PM	Fatma Zohra Laallam, Hassan Badaoui	Combining ensemble learning and data fusion for human activity recognition in Smart Homes
07:15 PM	Lucas LOPES, Antoine VINEL, Jérémie COMBAL, Stéphane TROUSSIANI, Jérémy Gelles	Deep learning based method to solve farm incentives based on analysis hierarchical process and Fuzzy Logic

07:30 PM - 07:45 PM

Venue: **Mediation workshop - Towards sustainable and healthy living environments in Africa: Public health and territorial planning policies connections**

Urban planning, public hygiene/health, precisiveness, and stakeholders from different sectors of society with a common interest in environmental developments of health in African cities. They is still an opportunity for transdisciplinary knowledge sharing, allowing participants to gain an understanding of the barriers and challenges in integrating health into spatial planning agendas - starting by the right data for evidence-based decision-making.

- Karim SOEMERING - Full Professor in Université Ethamiya Ulema Director of Institut Mediterraneen de Sante Publique
- Lara Thesia COLOMBO - Lecturer and doctoral assistant at Ecole Polytechnique Fédérale de Lausanne

May 24, 2023

08:30 AM - 09:00 AM — **Welcome services**

09:00 AM - 10:00 AM

Venue: **Outside city transformation**

Outside city transformation is a concept that is flourishing in Africa. It is a challenge for the Mediterra government, which is developing several projects, including the design and development of the Mohammed VI Polytechnic University in Ben Guerir, in Africa, in 2013. In Africa, it is a way to avoid the overcrowding of a town's city which will contribute to reducing the tourist and economic attractiveness of Benin.

- Karim ABDOUNI, Head of Management and Planning of Benin City
- Chaymaa MALAQUI - Associate Architect Cabinet Architecture
- Juan DESSAPTIEN - Lecturer Managing Director of the National Agency for the Promotion of Heritage and Development of Tourism

10:00 AM - 10:30 AM — **Coffee break**

10:30 AM - 11:00 AM

Venue: **The use of spatial data analysis for risk management**

The keynote speech will discuss the use of spatial data analysis and modeling techniques in African cities, rising real world scenarios, we will examine the challenges and opportunities presented by the diverse and dynamic urban landscapes in Africa, including issues such as rapid urbanization, climate change, and socio-economic disparities. The speaker will also discuss recent advances in spatial data analysis and modeling techniques and their potential to address these issues such as natural disasters, crime, and disease outbreaks.

- Yacine BAHI - Assistant Professor at Mohammed VI Polytechnic University
- Anna Flavia D'ERI - Founder of Sartoria Family

11:00 AM - 11:30 AM

Venue: **Liquid Smart City: An intelligent environment for a sustainable and resilient city**

During this session, we will examine the key features and outcomes of the liquid Smart City initiative, including the use of renewable energy, smart waste management systems, and digital infrastructure. The speaker will also discuss the potential impact of the liquid Smart City initiative on African cities and its potential scaling up and replication in other cities, with a focus on key stakeholders and partnerships in Kumasi.

- Michael EL ZEMMAR - Architect, Liquid City Councilor, and member of the urban planning & smart city committee

11:30 AM - 12:00 PM

Venue: **Women's entrepreneurship in the city**

This panel session will explore the challenges and opportunities faced by women entrepreneurs in African cities. We will discuss the unique barriers that women face in accessing capital, markets, and networks, and the impact of these barriers on the growth and sustainability of women-owned businesses. The panel will also highlight success stories from African City and share tips for women looking to start or grow their businesses in Africa, including the importance of building strong networks and accessing support from government and private sector organizations.

- Chaymaa MALAQUI - Academic researcher in the field of management

12:00 AM - 01:00 PM

Venue: **Session 3: The effects of port on landscape, mobility, and urban form case study cities: Accra, Lomé, Sidiboué**

A port and maritime geography, ports play an important role in the economies of cities and act as catalysts and hub development in specific economic sectors and locations and ports in strong contrast. This seminar discusses the port's impact on the urban form of Accra, Lomé, Sidiboué and Benin.

- Augustus ABBAN-DONKOR - Transport Analyst, Lecturer & Research Coordinator, Regional Transport Research and Education Centre, Kumasi (TRECK), KNUST

Papers:

Hour	Author(s)	Title
12:00 PM	Philipp Boeckler (Ghana)	Dimensions of Port-City Interface
12:05 PM	Augustus ABBAN-DONKOR, Emmanuel Kofi Kwakye-Danso (GHANA) and Samuel Adjei (GHANA) and Bernard NYARKO	Assessing the Impact of Port Activities on Land Use Patterns in Kumasi
12:10 PM	Augustus ABBAN, Charles Asuah (KNUST) and Emmanuel Kofi Kwakye-Danso	Eliminating passenger demand using machine learning models: a spatialmarkov review
12:15 PM	Kwame Nkansah TOBIAS (Tamale Ghana) KUMAS and Augustus ABBAN	Urban Transport Network Design and Management using Ant Colony and probabilistic access for integrated public transport system in an African city

01:00 PM - 02:00 PM — **Coffee break**

02:00 PM - 03:00 PM

Venue: **Collecting data to improve basic urban services in Africa Mobility - Health - Urban management**

By enabling better management of services such as energy, mobility and waste, data collection is an important step in the development of African cities. Data collection can provide valuable insights into the performance of these services and identify areas for improvement and optimization.

Join the discussion between public, sector, start-ups and entrepreneurs in Benin, who are designing and using innovative digital solutions to improve the quality of life of users.

- Mathieu-Marie LAPYA - Founder MOVEM Benin
- Idris AHOUSSOU - General Manager of the Waste Management Company (SGDS Sèc) - Benin
- Kossivi AFTCHAN - Head of Marketing at Sytic

03:00 PM - 04:00 PM

Venue: **Cloud computing for urban planning in Africa the case of SDI**

In this session, we will explore the potential of cloud computing in urban planning in Africa, using Google Earth Engine (GEE) as a case study. We will provide an overview of GEE and its capabilities and demonstrate how it can be used to analyze and visualize urban spatial data. We will also discuss the benefits and challenges of using cloud computing for urban planning in Africa, including issues related to data sovereignty, cybersecurity, and capacity building. The session will conclude with a lecture on the future of cloud computing and how it can be used to address the SDG 11 sustainable cities and communities.

- Karim AZIM - Researcher at the Center of Urban Systems (CUS) at Mohammed VI Polytechnic University
- Brahim ARIAR - Assistant Professor at Mohammed VI Polytechnic University - LANAM

04:00 PM - 05:00 PM

Venue: **Urban extension modeling with GIS**

This keynote will explore how GIS can be used to predict and plan for urban growth and future expansion, with a focus on techniques such as land use change modeling, suitability analysis, and spatial regression. We will also discuss the potential of these methods for informing urban planning and policy decision-making. The speaker will provide examples of successful applications of these methods in cities worldwide, and discuss the implications and challenges for applying these techniques in African contexts.

- Thomas LAMBELIN - Project manager at WASHDAT

05:00 PM - 05:30 PM

Venue: **What governance mechanisms to mitigate the societal impacts of the digital revolution in African cities?**

Moderator:

Stephane TROUSSIANI - Researcher at the Center of Urban System (CUS) of the Mohammed VI Polytechnic University

Lasanta JEUTLA - Urban Planner

Anna BRAGHIERI - Consultant in urban policies

Marie-Louise Simone NYONABE NASS NELSER - PhD student at the Regional Centre of Excellence in Cities in Africa CERVIDA-SENGHOR Lyon/Tours

05:30 PM - 06:00 PM

Venue: **Session 2: Public transport system and public health risk**

Rapid population growth and urbanization are stimulating growth in African cities. The informal and inefficient public transport system in most African cities has contributed to poor health, with, with its associated externalities. The session investigates the public transport system and the major public health hazard of transport in Africa.

- Augustus ABBAN-DONKOR - Transport Analyst, Lecturer & Research Coordinator, Regional Transport Research and Education Centre, Kumasi (TRECK), KNUST

Papers:

Hour	Author(s)	Title
05:30 PM	Fabien Bio-Tchané KOUSSA, Abdoulaye S. KEBBEKUS and Bernard Fortin KUMAKLO	Measurement of traffic noise levels and assessment of its public health risks
05:35 PM	Mahouton N. ABIOLA, Cyriaque ADJIN, Eric KOUMAGNI and Augustin Fabien KOUMAGNI	Proposal of a GPS system for urban public transport
05:40 PM	Mahouton N. ABIOLA, Cyriaque ADJIN, Eric KOUMAGNI and Wilfrem Gnonlonfoun KOUMAGNI	Investigating factors affecting passenger travel times perspectives from two paratransit routes in Kumasi, Ghana
05:45 PM	Cyriaque ADJIN, Mahouton N. ABIOLA, Eric KOUMAGNI, Jorge PATRIC, Kwadwo DAKUO, Wilfrem Gnonlonfoun KOUMAGNI	Ensuring sustainability via accessible transport systems for all in Accra and Kumasi
05:50 PM	Francisco SERRA-TERA PEZO	Systems for urban crime: creating a data space for the Metro Metropolitan survey

06:00 PM - 06:30 PM — **Coffee break**

06:30 PM - 06:50 PM

Venue: **African Cities Lab: A gamechanger that transforms African cities**

Presentation of the African Cities Lab project, the institutions from Anglophone and Francophone Africa are collaborating to create an African digital education platform that will provide students with the skills and knowledge needed to address the challenges of urbanization and climate change. The platform is a form for the exchange of digital educational resources and management and governance of African cities to promote sustainable development.

06:50 PM - 07:20 PM

Venue: **Digital transformation and digital governance**

In this session, we will discussion recent research that explores the role of smart digital technologies and sharing urban citizenship, participation, and governance in Africa, and the opportunities and challenges that these technologies present for urban governance and citizen engagement in African cities. The speaker will discuss the potential benefits of digital governance, such as increased transparency and accountability, improved service delivery, and enhanced citizen engagement, and the challenges of digital governance, such as the risk of exclusion, data privacy and security, and the need for capacity building and infrastructure investments. The speaker will provide examples of successful applications of digital governance in African cities, and discuss the implications and challenges for scaling up these initiatives and ensuring that they are inclusive and sustainable.

- Dr Sophie DUPONT - Researcher at the Center of Urban Systems (CUS) at Mohammed VI Polytechnic University

Papers:

Hour	Author(s)	Title
06:50 PM	Tania ARROYO	Combinations of smart cities: the challenge of SMART Governance and territorial policies in Africa
06:55 PM	Tania APPA and Hagaj MOUSSAID	Exploring the challenges and opportunities of the digital transition of the city of Bouskoura and the city of Biarritz in the context of the Covid-19 crisis
07:00 PM	Dr Kamaria Jaiteh JALLOW Mohammed Ali SESAY	Solutions for mitigating the negative impacts of the digital revolution in African cities
07:05 PM	Lucas CHEUZAT and Florence FL-Florence FL-Florence FL	Why creating a Digitopia de la « gouvernance » utopie, ou en amont d'actions ? Ou en aval ou ou ou