

AFRICAN
DATA
SCIENCE
CONFERENCE
24-26 JUNE 2026
WITS UNIVERSITY

Concept Document

African Data Science Conference 2026

Theme: African Data Science, for Africa

A continental platform for advancing data science, artificial intelligence, responsible innovation, and African-centred digital transformation.

Conference Details	
Host institution:	University of the Witwatersrand
Venue:	Wits Science Stadium, University of the Witwatersrand, Johannesburg, South Africa
Main conference:	24–26 June 2026
Optional workshops:	23 June 2026
Format:	In-person scholarly and professional conference

Prepared for institutional circulation, sponsorship engagement, strategic partnership development, and conference positioning.

Purpose of this Concept Document

This concept document presents the strategic rationale, intellectual positioning, programme architecture, governance basis, sponsorship rationale, and expected impact of the African Data Science Conference 2026. It is intended for university leadership, sponsors, institutional partners, government departments, research councils, development agencies, industry stakeholders, academic collaborators, professional bodies, and potential funders.

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1. Executive Summary

The African Data Science Conference 2026, hereafter referred to as ADSC 2026, is a scholarly, professional, institutional, and continental platform convened under the theme *African Data Science, for Africa*. Hosted by the University of the Witwatersrand at the Wits Science Stadium in Johannesburg, South Africa, from 24–26 June 2026, with optional pre-conference workshops on 23 June 2026, the conference is designed to strengthen the African data science ecosystem through research exchange, postgraduate development, industry engagement, policy dialogue, responsible artificial intelligence, and institutional collaboration.

ADSC 2026 emerges at a moment when data science, artificial intelligence, machine learning, statistics, analytics, and digital transformation are rapidly reshaping economies, institutions, public services, scientific discovery, and social development. While these technologies are global in reach, their responsible and meaningful adoption requires local knowledge, contextual understanding, African-led scholarship, and sustained capacity building. The conference therefore seeks to provide a rigorous and inclusive platform through which African researchers, students, practitioners, policymakers, innovators, technology leaders, and institutional stakeholders can engage the opportunities and responsibilities of data-driven transformation.

The conference is positioned as more than a technical meeting. It is a structured platform for dialogue across academia, industry, government, civil society, and development institutions. It will bring together keynote addresses, technical paper sessions, panel discussions, industry lightning talks, pre-conference workshops, poster presentations, exhibitions, sponsor showcases, networking engagements, and postgraduate development activities. Through this programme architecture, ADSC 2026 will connect scholarly excellence with practical relevance and institutional impact.

Strategic Positioning

ADSC 2026 is designed to contribute to Africa's data science future by strengthening research networks, supporting postgraduate and early-career researchers, advancing responsible AI dialogue, showcasing African-centred innovation, and creating a sustainable conference platform for future editions.

2. Background and Rationale

Data science has become one of the defining knowledge domains of the twenty-first century. Its influence is visible across scientific research, business decision-making, public policy, healthcare, climate resilience, financial systems, education, digital governance, and technological innovation. In Africa, the significance of data science is particularly profound because the continent faces complex developmental challenges while also possessing distinctive opportunities for innovation, entrepreneurship, institutional transformation, and inclusive growth.

The growth of artificial intelligence, machine learning, analytics, digital platforms, geospatial technologies, and large-scale data infrastructures has created new possibilities for evidence-informed decision-making. At the same time, it has raised important questions about ethics, accountability, data governance, algorithmic bias, privacy, institutional readiness, local capacity, and the social consequences of automated systems. These questions cannot be addressed adequately through imported frameworks alone. They require African scholarship, African datasets, African institutional experience, and African-centred conversations about technology, development, and society.

ADSC 2026 responds to this need by creating a continental platform for rigorous academic engagement and practical knowledge exchange. The conference recognises that data science capacity cannot be built only through isolated technical training. It requires strong postgraduate pipelines, interdisciplinary research communities, institutional partnerships, industry collaboration, responsible innovation frameworks, and sustained spaces for debate. It also requires mechanisms through which emerging scholars and practitioners can present their work, receive feedback, develop networks, and contribute to Africa's participation in global data science conversations.

The University of the Witwatersrand provides a fitting institutional home for this initiative. Located in Johannesburg, a major African economic, technological, and intellectual hub, Wits is well positioned to host a conference that brings together scholars, practitioners, policymakers, institutional leaders, industry partners, and development actors concerned with the future of data science and artificial intelligence in Africa.

3. Conference Vision

The vision of ADSC 2026 is to establish a credible, inclusive, and intellectually ambitious platform for advancing African data science research, education, practice, and policy engagement. The conference seeks to strengthen Africa's capacity not only to adopt data science and artificial intelligence, but also to shape their development, critique their assumptions, govern their use, and apply them responsibly to African realities.

This vision rests on the conviction that Africa must be an active contributor to global data science debates. African institutions, researchers, students, and innovators should not be positioned merely as consumers of technologies developed elsewhere. They should be supported as knowledge producers, methodological contributors, ethical voices, and solution builders. ADSC 2026 therefore aims to provide a platform where African data science can be articulated with scholarly depth, practical relevance, and developmental purpose.

Vision Statement

To build a sustainable African platform that advances data science, artificial intelligence, statistical learning, analytics, responsible innovation, and digital transformation in ways that are intellectually rigorous, institutionally credible, socially responsive, and rooted in

African contexts.

4. Conference Objectives

ADSC 2026 is guided by a set of strategic objectives that combine scholarly excellence, institutional collaboration, professional relevance, and social impact.

Core Objectives of ADSC 2026

- To promote high-quality research exchange across data science, artificial intelligence, machine learning, statistics, analytics, and related interdisciplinary fields.
- To support postgraduate students and early-career researchers through opportunities for presentation, feedback, mentorship, networking, and professional development.
- To strengthen collaboration between universities, industry, government, research institutions, development partners, professional bodies, and civil society.
- To advance critical discussion on responsible AI, data governance, algorithmic accountability, ethical innovation, and context-sensitive digital transformation.
- To showcase African-centred applications of data science in areas such as health, climate, business, finance, education, geospatial analytics, public policy, and sustainability.
- To build professional and institutional networks that can support future research collaborations, applied projects, policy engagement, and capacity-building initiatives.
- To create a sustainable platform for future editions of the African Data Science Conference.

5. Strategic Themes

The intellectual scope of ADSC 2026 is deliberately broad, reflecting the interdisciplinary nature of data science and its relevance across multiple sectors. The conference will provide space for both technical and applied contributions, while also encouraging critical reflection on governance, ethics, education, and institutional transformation.

Major strategic themes include data science, artificial intelligence, machine learning, statistical learning, responsible AI, data governance, business analytics, health analytics, climate and sustainability analytics, geospatial data science, fintech, digital transformation, data science education, and African-centred innovation.

Thematic Emphasis

The conference is designed to bring together methodological rigour and applied relevance. It will welcome technical research, empirical studies, conceptual contributions, industry case studies, policy reflections, educational innovations, and interdisciplinary work that advances data science in African and globally relevant contexts.

The theme *African Data Science, for Africa* does not imply intellectual isolation. Rather, it affirms the need for African relevance within global scholarship. It invites work that is internationally credible while being attentive to the continent's datasets, institutions, histories, developmental priorities, ethical concerns, and innovation ecosystems.

6. Target Audience

ADSC 2026 is intended for a diverse and influential audience. The conference recognises that data science is not confined to a single discipline, sector, or profession. It therefore seeks to attract participants from across academia, industry, government, development organisations, research institutions, professional communities, and civil society.

The target audience includes postgraduate students, academics, researchers, data scientists, AI professionals, statisticians, analytics specialists, industry practitioners, consultants, policymakers, innovators, institutional leaders, government representatives, development partners, technology organisations, research councils, professional bodies, sponsors, and funders.

Audience Profile

Postgraduate students	Emerging researchers seeking feedback, networks, mentorship, and exposure to advanced data science scholarship.
Academics and researchers	Scholars working across data science, AI, machine learning, statistics, analytics, digital transformation, and applied domains.
Industry practitioners	Data scientists, AI specialists, analytics leaders, consultants, technology teams, and business executives.
Policymakers and public actors	Stakeholders concerned with data governance, responsible AI, digital policy, and evidence-informed decision-making.
Institutional leaders	University, research, industry, professional body, and development-sector leaders shaping capacity and collaboration.
Sponsors and partners	Organisations seeking visibility, thought leadership, talent engagement, research collaboration, and social impact.

7. Conference Format and Programme Design

ADSC 2026 will be convened as an in-person conference with a programme structure designed to balance academic depth, professional relevance, strategic dialogue, and networking. The format will allow participants to engage with advanced research, practical applications, institutional questions, and policy-relevant debates.

The programme will include keynote addresses by leading scholars and institutional voices; technical paper sessions covering methodological, empirical, and applied research; panel discussions on strategic themes such as AI governance and data science education; optional pre-conference workshops; industry lightning talks; poster presentations; exhibitions; sponsor showcases; networking sessions; postgraduate development activities; and responsible AI and governance conversations.

This programme design reflects the conference's central purpose: to connect knowledge creation with capacity building, responsible innovation, institutional collaboration, and African development priorities. The conference will therefore provide both formal presentation spaces and informal engagement opportunities through which delegates can build relationships and identify future collaborations.

Programme Design Principle

The ADSC 2026 programme is designed around the principle that data science conferences should not only present research. They should build communities, support emerging scholars, connect sectors, strengthen institutional capacity, and create pathways for responsible innovation.

8. Keynote and Featured Speaker Platform

A major feature of ADSC 2026 will be its keynote and featured speaker platform. The conference will bring together leading academic, research, industry, and institutional voices who can speak to the scientific, strategic, developmental, and ethical dimensions of data science and artificial intelligence.

The keynote platform is intended to elevate the intellectual standing of the conference while also creating shared reference points for delegates. It will provide opportunities to engage major questions concerning African scientific leadership, responsible AI, data-driven development, interdisciplinary research, institutional transformation, and the future of digital innovation on the continent.

Confirmed Keynote and Featured Speakers

- Prof. Loyiso Nongxa
- Prof. Maurice Radebe
- Prof. Inger Fabris-Rotelli
- Prof. Vukosi Marivate
- Prof. Karin-Therese Howell
- Prof. Benjamin Rosman

These speakers reflect the conference's commitment to intellectual excellence, African relevance, methodological depth, institutional leadership, and high-level engagement across science, technology, innovation, and society.

9. Pre-Conference Workshops

Optional pre-conference workshops are scheduled for 23 June 2026. These workshops will provide focused opportunities for practical training, scholarly development, professional reflection, and engagement with emerging areas in data science and artificial intelligence.

The workshops are designed to complement the main conference programme by offering more concentrated learning spaces. They will support postgraduate students, early-career researchers, academics, industry practitioners, and professionals who wish to deepen their understanding of selected tools, methods, research practices, and industry applications.

Planned Pre-Conference Workshops

- **Beyond Vibe Coding: Building Trustworthy Data Science with LLM Agents**
  Naweed Khan and Dr Ndivhuwo Makondo, IBM Research.
- **Introduction to Spatial Data Science**
  Prof. Inger Fabris-Rotelli, University of Pretoria.
- **Publishing in Top Tier Journals**
  Prof. Moinak Maiti, Wits University.
- **Data Science in Industry**
  Prof. Charis Harley, University of Johannesburg.

Collectively, these workshops reflect the applied, scholarly, and professional development orientation of ADSC 2026. They also demonstrate the conference's commitment to supporting skills development, research quality, industry engagement, and methodological breadth.

10. Governance and Institutional Credibility

ADSC 2026 is supported by a formal governance structure designed to ensure academic quality, operational accountability, programme coherence, editorial oversight, sponsorship engagement, and institutional credibility. This structure distinguishes the conference as an organised and accountable scholarly platform rather than an ad hoc event.

The governance framework includes Advisors, the Scientific Committee, the Programme Committee, the Conference Proceedings Editors, the Organising Committee, and the Fundraising Committee. Each structure has a defined role, while coordination across the structures is maintained through the Conference Chair and relevant committee leadership.

Governance Architecture

Advisors	Provide high-level strategic, institutional, and scholarly guidance.
Scientific Committee	Safeguards academic integrity, intellectual direction, peer review standards, and scholarly quality.
Programme Committee	Supports the development, sequencing, and coherence of the conference programme under scientific oversight.
Conference Proceedings Editors	Oversee publication quality, formatting compliance, editorial coherence, and proceedings-related matters.
Organising Committee	Coordinates practical planning, logistics, administration, scheduling, venue arrangements, and delivery.
Fundraising Committee	Supports sponsorship development, donor engagement, institutional partnerships, and resource mobilisation.

This governance architecture supports transparent decision-making and clear separation of responsibilities. It also provides a basis for continuity beyond ADSC 2026, enabling the conference to develop into a recurring platform with institutional memory, documented processes, and sustainable committee structures.

11. Sponsorship and Partnership Rationale

ADSC 2026 offers sponsors and partners a meaningful opportunity to contribute to the growth of the African data science ecosystem while gaining visibility among a highly engaged academic, professional, institutional, and policy audience. Sponsorship is not presented merely as brand placement. It is an opportunity to invest in African research capacity, postgraduate development, responsible innovation, and cross-sector collaboration.

Organisations that support ADSC 2026 will be associated with a conference platform that brings together researchers, students, industry practitioners, policymakers, innovators, technology leaders,

development partners, and institutional executives. This provides opportunities for strategic visibility, thought leadership, talent engagement, research collaboration, professional networking, and social impact.

Why Partner with ADSC 2026?

- **Strategic visibility:** Position the organisation within a growing African data science and AI ecosystem.
- **Thought leadership:** Associate the organisation with responsible AI, analytics, digital transformation, and African innovation.
- **Talent development:** Engage postgraduate students, early-career researchers, emerging data scientists, and analytics professionals.
- **Research collaboration:** Build connections with academics, research groups, laboratories, and applied data science teams.
- **Industry engagement:** Showcase tools, platforms, services, use cases, and strategic initiatives to a specialised audience.
- **Social impact:** Support student participation, postgraduate development, African capacity building, and inclusive knowledge exchange.

Sponsorship contributions may support student participation, registration waivers, postgraduate development, workshops, prizes and awards, conference materials, exhibition activities, responsible AI capacity building, industry engagement, and institutional partnerships. Tailored sponsorship arrangements may also be developed where an organisation wishes to support a specific strategic area, such as data science education, AI governance, student access, research dissemination, or industry showcases.

12. Expected Outcomes and Impact

The expected outcomes of ADSC 2026 span scholarly, institutional, professional, developmental, and societal dimensions. The conference is intended to generate value not only during the days of the event, but also through the relationships, collaborations, publications, and institutional initiatives that follow.

Expected Outcomes

- Stronger African data science research networks across universities, research institutions, industry, government, and development organisations.
- Enhanced capacity among postgraduate students and early-career researchers through

presentation opportunities, feedback, workshops, and mentorship.

- New university-industry-government collaborations around applied data science, AI, analytics, governance, and digital transformation.
- Increased visibility for African data science research, innovation, and methodological contributions.
- Stronger dialogue on responsible AI, data governance, algorithmic accountability, and context-sensitive digital policy.
- Improved engagement between academic research and professional practice.
- Opportunities for proceedings, publications, and scholarly dissemination.
- A foundation for future editions of the African Data Science Conference.

The impact of ADSC 2026 will be measured not only by attendance numbers or programme activity, but also by the extent to which it strengthens the ecosystem around African data science. This includes the development of research communities, the growth of institutional partnerships, the empowerment of emerging scholars, and the creation of shared language around responsible and contextually grounded innovation.

13. Sustainability and Future Development

ADSC 2026 is conceived as a foundation for a recurring African Data Science Conference series. Its value lies not only in convening a successful 2026 event, but also in establishing a durable platform that can evolve over time, expand its reach, and contribute to the long-term development of Africa's data science ecosystem.

Sustainability will depend on several interrelated factors. These include continuity of institutional memory, careful documentation of governance processes, strong committee structures, credible sponsorship models, publication and proceedings pipelines, strategic partnerships, and ongoing engagement with universities, professional bodies, research councils, industry partners, government actors, and development institutions.

Future editions of the conference may build on the structures established for ADSC 2026 while adapting to new themes, host institutions, regional priorities, and emerging technological developments. In this way, ADSC can become a living platform: responsive to change, grounded in African realities, and connected to global debates.

Sustainability Principle

The long-term success of ADSC depends on transforming the conference from a single event into a recurring institutional platform for African data science scholarship, capacity building, responsible innovation, and cross-sector collaboration.

14. Communication and Visibility Strategy

A strong communication and visibility strategy is essential to the success of ADSC 2026. The conference will use official digital channels, institutional networks, partner communication platforms, professional bodies, social media, and direct stakeholder engagement to reach presenters, delegates, sponsors, policymakers, research institutions, and the wider public.

The communication strategy will support delegate recruitment, sponsorship engagement, programme visibility, workshop promotion, keynote announcements, institutional credibility, and public awareness of the conference theme. It will also help build a recognisable identity for ADSC as a continental data science platform.

Official Communication Channels

Conference website:	ADSC 2026 official conference website
Registration portal:	ADSC 2026 registration portal
LinkedIn page:	African Data Science Conference LinkedIn page
General enquiries:	adsc2026@easychair.org

The visibility strategy will emphasise the conference's distinctive positioning: *African Data Science, for Africa*. This message will guide communication with academic institutions, sponsors, students, researchers, industry partners, and public-sector stakeholders.

15. Institutional Contacts

Key Conference Contacts

General enquiries	adsc2026@easychair.org
Conference and Programme Chair	Dr Farai Mlambo, University of the Witwatersrand
Scientific Committee Chair	Prof. Inger Fabris-Rotelli, University of Pretoria

Organising Committee Chair	Dr Taariq Surtee, University of the Witwatersrand
Fundraising Committee Chair	Dr Isaac Nyambiya, Great Zimbabwe University

16. Conclusion

ADSC 2026 is more than a conference. It is a continental platform for strengthening African data science capacity, advancing scholarly excellence, supporting postgraduate and early-career researchers, deepening university-industry-government collaboration, and promoting responsible innovation in the age of artificial intelligence.

Under the theme *African Data Science, for Africa*, the conference affirms that Africa must participate actively in shaping the methods, applications, ethics, governance, and future direction of data science. It recognises that technological progress must be accompanied by intellectual leadership, institutional capacity, ethical responsibility, and contextual relevance.

By bringing together researchers, students, practitioners, policymakers, sponsors, development partners, and institutional leaders, ADSC 2026 will create a space for knowledge exchange, professional connection, strategic dialogue, and long-term collaboration. Its contribution will lie not only in the presentations delivered, but in the networks formed, ideas refined, partnerships initiated, and future possibilities opened.

Closing Statement

ADSC 2026 seeks to build a platform where African data science is not merely discussed, but strengthened; not merely imported, but shaped; not merely applied, but governed responsibly; and not merely imagined, but advanced for Africa's digital and developmental future.