

Xam Xamlé

Gather Knowledge and Share

Impact Report
Deep Learning Indaba

2024

SENEGAL



DEEP
LEARNING
INDABA

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Message from the Trustees

For you reading this report, thank you for enabling our work and following our impact. If we have one request as you go through this report, it is that you continue to connect us to philanthropists and potential donors who can financially support our work to enable the broad set of impacts that we are focussed on continuously attaining. This is a common request, but one that is essential for our work in the changing funding landscapes.

We begin each year of our work guided by the words and wisdom of an African intellectual, elder and inspiration from the past. The quote below from Miriama Ba captured the role of the Deep Learning Indaba and its organisers for 2024, and the work of this noble group has shown more of what is possible in relation to AI across Africa:

“[You] form a noble army accomplishing daily feats, never praised, never decorated. An army without drums, without gleaming uniforms. This army, thwarting traps and snares, everywhere plants the flag of knowledge and morality.” —Mariama Bâ, So Long a Letter (French: Une si longue lettre)

This year, we make a slight shift in summarising our past year in the form of an impact report. The programmes of the Indaba, its operational efficiencies and organising approach remains the same, but we are choosing to frame our work throughout a year in terms of its impacts and the changes it is enabling in the ecosystem, and the importance to our beneficiaries, so that the value and ongoing significance of our work can be better understood.

This year has been one of our most ambitious, and throughout we preserved the pioneering, experimental and service-driven nature of our work and culture. The theme for the Annual Indaba in 2024 was the Wolof phrase *Xam Xamlé*, which means to *gather knowledge and share it*, which perfectly captures our charitable and educational mission.

Our mission to Strengthen African AI remains necessary and valued, and this impact report shows all the ways in which we execute that mission. As always, continued progress in African AI is only possible because of the communities and individuals who volunteer their time, expertise and energy for the Indaba’s mission, despite all the challenges and constraints they may face. We are immensely grateful for their contributions—they showcase the power of Ubuntu and service towards Africa’s communities and future.

*On Behalf of the Board of Trustees
Dr Shakir Mohamed
Co-founder and Chair*

Summary in Seven Impact Areas

Our impacts are broad, and we consider our impacts across seven areas: six areas for continental transformation, and one organisationally-focussed on our internal growth and maturity. Our impact aims support our educational and charitable mission.

Over 2024, we Strengthened African AI:

1. **Talent.** Our commitment to advancing talent, skills and Competencies allowed us to: advanced the national agenda in Senegal, where the annual Deep Learning Indaba was hosted; showcased a continent-wide network of AI expertise; advanced technical skills in LLMs for African languages, AI for Biology, and fundamental ML research; and drove focussed skills development through active mentorship.
2. **Research.** We supported the advancement of novel research and dissemination through publications, where we established higher quality on a focussed set of 50 papers; the Africa Research showcase created visibility and opportunity for teams behind almost 250 research projects; and we distributed the Lacuna fund grant of approximately \$500k to 5 projects in African language technologies.
3. **Innovation.** We strengthened the pipeline of ideas to deployment by showcasing innovation and commercialisation from 69 startups across the continent, hosting startup showcases and pitch sessions, and embedding the role of company building in Africa's AI ecosystem; the Ideathon helped accelerate new cross-continental collaborations that are the seed for future startups and innovations.
4. **Ownership and Capacity.** New technical communities have been identified or established in 47 countries across the continent, achieving the goal of setting the foundations for AI readiness, ownership and capacity at a continental-scale.
5. **Leadership.** The Indaba awards, which honour African scientific and intellectual luminaries, celebrated and elevated the pioneering work of researchers innovators in 5 categories, and showcased the breadth of leadership and excellence that already exists.
6. **Communities.** We've established the platform that brings together Africa's leading innovation groups across fields particularly in Languages, Vision, Health, and Climate; hosted sessions to connect leaders of community groups supporting leadership development; and invested in the visibility of community groups to help advance their own missions and impacts.
7. **The Indaba Organisation.** We continue to make progress in building an extraordinary organization to support the impacts and future ambition: by professionalising our internal processes, actively managing risks, and having a strategy for more ambitious and transformative approaches to Strengthen African AI.



Strengthening African AI

Talent

Impact summary: Our commitment to advancing talent, skills and competencies allowed us to: advanced the national agenda in Senegal, where the annual Deep Learning Indaba was hosted; showcased a continent-wide network of AI expertise; advanced technical skills in LLMs for African languages, AI for Biology, and fundamental ML research; and drove focused skills development through active mentorship.

The Deep Learning Indaba develops Africa's next generation of AI leaders through targeted educational interventions, addressing critical gaps in technical education and professional development. Within the growing African AI landscape, the Deep Learning Indaba serves as a pan-African catalyst, connecting diverse stakeholders through its continent-wide network and alumni base of over 10,000 AI practitioners. Through high-quality technical training and year-round programs, the Indaba bridges the gap between grassroots communities, academic institutions, and industry, channeling talented individuals into impactful roles across the ecosystem.

Annual Deep Learning Indaba

The annual Deep Learning Indaba is the annual gathering of the African AI community and platform for its ecosystem. The 2024 annual Indaba took place at the western-most tip of Africa in Dakar, Senegal, from September 1st to 7th, hosted at the Amadou Makhtar Mbow University. Senegal's characteristic generosity, hospitality, and warmth—an identity best encapsulated by the phrase *teraanga*—perfectly aligned with the values of the Deep Learning Indaba and set the tone for the week's activities. This spirit of generosity extended to the theme of the 2024 Indaba: "Xam-Xamlé", meaning "arm yourself with knowledge and share it" in Wolof. It was within this fertile and generous AI knowledge ecosystem that the Deep Learning Indaba grew symbiotically with our African counterparts.

Senegal proved to be an ideal location as the epicenter of a strong AI ecosystem, with one of the most active IndabaX communities and the presence of exciting organisations and communities, including AI Hub Senegal, Université Amadou Mahtar Mbow, IAS, WiMLDS Dakar, and GalsenAI. The timing was particularly significant as the government of Senegal had recently validated and begun implementing the national AI strategy, marking a major step forward in developing and strengthening the local AI ecosystem. Additionally, with Senegal's position as the lead in IT and IT-enabled services among pan-African organisations promoting digital transformation agendas, the selection of Dakar as the host city successfully showcased the vibrant tech ecosystem burgeoning there, while fostering collaborations and opportunities that drove innovation not just within Senegal, but across the entire continent.

Our 2024 Indaba programme featured the core elements our community has come to value: workshops, practical sessions, keynotes, poster sessions, publications and networking events. Building on last year's success, we expanded our publication pathway through journal collaborations and structured mentorship. We increased opportunities for informal knowledge exchange and mentorship connections. The Ideathon programme was extended beyond the Indaba week to a 3-month post-event period, allowing teams to refine their proposals more thoroughly. Additionally, we redesigned our application process to better support attendees requiring studentships for travel and accommodation.

Building on this momentum across the continent, the 2024 Deep Learning Indaba in Dakar, Senegal embodied the organisation's commitment to nurturing Africa's AI talent through carefully designed learning experiences. The program directly responded to the ecosystem's evolving needs by featuring advanced technical tutorials in large language models and federated learning, alongside workshops on responsible AI and climate applications – areas where African innovation is increasingly sought after. Structured mentorship sessions connected participants with leaders from established AI labs and startups across the continent, while the Research in Africa Showcase Day provided a powerful platform for emerging talents to present their innovations. This combination of technical depth, practical application, and networking opportunities exemplified DLI's role in bridging the gap between academic knowledge and real-world impact in Africa's growing AI landscape.

The 2024 Indaba in Numbers:

- 2775 Applicants, who had to provide information on their motivations for attending and how they would spread what they learned upon their return home.
- 617 Attendees. Selected through a comprehensive review by an independent panel.
- 40% Female. We continue to have a high percentage of female attendees and are close to our target of gender parity in composition.
- 67 Countries globally represented, of which 37 are countries of Africa.
- 317 Accommodation grants and 200 full travel scholarships awarded, which are essential to reducing barriers to participation for our beneficiaries.

The success of the 2024 Dakar Indaba, with its programmatic enhancements and ecosystem engagement, has informed our strategic vision moving forward, ensuring not only the Indaba's continued excellence but also strengthening its position as a sustainable, continent-wide platform for African AI innovation and talent development for years to come.

Technical Training & Resources

The 2024 Indaba delivered a comprehensive technical education program designed to address varying skill levels across participants. Core tutorials paired theoretical foundations with hands-on coding sessions, covering high-demand topics:

- Introduction to Machine Learning using JAX
- Low Resource LLMs
- Responsible AI
- Foundations of Large Language Models
- AI for Biology
- Graph Neural Networks
- Federated Learning

Language technology emerged as a focal point, with specialised sessions on low-resourced NLP and RAG augmentation. Industry partnerships with LAfricaMobile and Meta enhanced the practical component through developer-focused tutorials. All materials were made permanently available through the Indaba GitHub repository, supporting continued learning beyond the event.

Participant feedback highlighted the program's effectiveness and knowledge diffusion in action: *"I really enjoyed the practical sessions. I think the practicals repository is golden"* and *"I might use some parts of the federated learning practical in my class :)".*

Hackathon Program

The 2024 hackathon program engaged 220 participants from 30 countries in intensive 72-hour challenges focused on real-world AI applications. Delivered in partnership with industry leaders Zindi, Meta, and InstaDeep, the program aimed to develop production-ready technical skills through team-based problem-solving (see the programme pages [here](#) and [here](#)). Each challenge was structured to build competencies in:

- Rapid prototyping of AI solutions
- System integration under real-world constraints
- Collaborative development and version control
- Model optimisation and deployment

The hackathons focused on application areas relevant to Africa, with Meta's hackathon addressing NLP for low-resource languages by leveraging a dataset developed by GhanaNLP, and InstaDeep's hackathon tackling antivenom sequencing for snake bites, a significant public health issue in Senegal.

To incentivise continued learning and development, the program offered:

- A \$10,000 USD prize pool for winning solutions
- Nvidia Instruction Led & Self-paced courses
- GoMyCode Data Science Bootcamp access
- Technical literature in Reinforcement Learning, Graph Neural Networks, and Mathematical Foundations

This structured combination of competitive challenges and learning resources equipped participants with industry-relevant experience in AI development – from prototyping to deployment – while building essential workplace competencies in code review, documentation, and project management. These skills directly align with technical requirements across Africa's growing AI ecosystem.

The hackathons continue to be relevant to the African context, bringing together partners from across the ecosystem and creating opportunities for continued development beyond the event. For next year, we plan to provide participants with more preparation time ahead of the annual event to enhance onboarding and readiness.

Mentorship

In response to participant feedback highlighting the critical role of comprehensive professional support, we expanded our professional development initiatives in 2024. Our enhanced approach focused on creating multi-touchpoint engagement opportunities, strengthening our mentorship infrastructure, and broadening access to learning resources.

Mentorship Programme

Central to these efforts is our mentorship programme, which has become a cornerstone of our professional development strategy since its launch in 2020. The programme addresses several critical gaps in the African machine learning ecosystem, including isolation of researchers, limited access to experienced supervisors, and the need for enhanced power skills development.

Key achievements and metrics of the mentorship programme include:

- A robust global network of over 400 mentors spanning academia and industry, with 50% being industry professionals across software development, research engineering, and scientific roles
- Significant community engagement with 955 total signups and 649 completed mentorship sessions since inception
- Strong representation of mentees across career stages, with 34% undergraduates, 33% postgraduates (24% Masters, 9% PhD), and 14% industry professionals

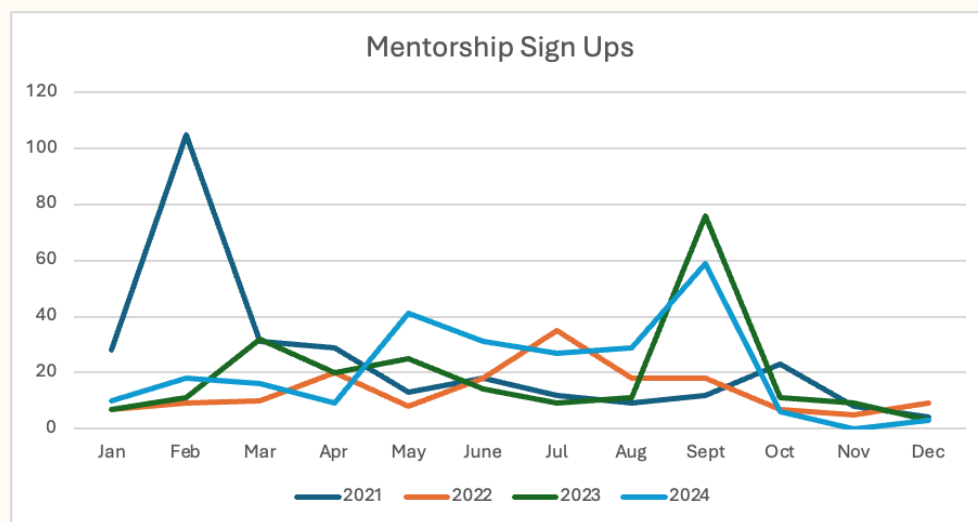
- Strong representation of mentors in a global networks, with 50% of mentors in industry and 17% academic faculty members, 15% PhD students, and 5% post-doc (with some mentors having more than one title)
- Consistent year-on-year participation, with 246 signups and 157 completed sessions in 2024 alone

The programme's impact is evidenced through numerous success stories, including mentees publishing papers and securing prestigious postgraduate scholarships. Participant feedback consistently highlights the value of personalised guidance, with mentees reporting increased confidence in their professional skills and improved quality of their academic materials.

Looking ahead to 2025, we are expanding the programme's scope to include:

- Dedicated support for the Publications track, including reviewer mentorship and paper submission guidance
- Enhanced support for the Research in Africa Showcase, focusing on presentation and poster development
- Integration with the Ideathon initiative, providing targeted mentorship for participants

As we continue to evolve, our focus remains on ensuring the programme meets the dynamic needs of the African machine learning community while maintaining the high-quality, personalised support that has become its hallmark.



Mentorship Sessions

This year, structured mentorship sessions were integrated throughout the conference schedule, offering flexible timing with breakfast, lunch, and evening options, totaling 12 mentorship sessions during the week. Representatives from leading organisations including Google Research, Mila, Apple, Meta, and InstaDeep participated in these

dedicated sessions. The informal settings facilitated meaningful spaces for knowledge exchange about real-world challenges and solutions, allowing participants to engage with multiple mentors simultaneously.

These sessions provided guidance on diverse career development topics including graduate school applications, securing full-time positions, developing essential AI skills, addressing common technical interview skill gaps, and understanding AI research roadmaps. This approach proved highly successful, as reflected in participant feedback: "I learnt how to get grants and data sets," demonstrating how these interactions translated into actionable knowledge for attendees.

Professional Development Partnerships

The 2024 Indaba significantly expanded professional development opportunities through strategic sponsor partnerships, creating a comprehensive ecosystem of support for African AI talent.

Career Development Initiatives

Professional development extended beyond technical training through structured career advancement programs. Google DeepMind led this effort by conducting approximately 20 scheduled mock interviews and drop-in CV feedback sessions. Notably, these sessions were available in both English and French—with the French-language interviews being piloted for the first time to accommodate the 25% of participants more comfortable communicating in French.

Women in Machine Learning Focus

The 2024 Indaba marked the first year where dedicated funding was exclusively allocated to supporting Women in Machine Learning (WiML) initiatives, with contributions from Askya Investment Partners, CISPA, Eramet, and the Tony Blair Institute. A highlight was "The Power of African Women in Machine Learning: Innovating Through Diversity" session moderated by Indaba trustee Kathleen Siminyu, which explored both current achievements and future pathways.

Scholarship & Fellowship Opportunities

Several partners created pathways for continued growth beyond the event:

- CISPA Helmholtz Center sponsored a "Women's Academic Mentorship" award, matching a female poster winner with a CISPA faculty researcher for a year-long mentorship program.

- InstaDeep announced their forthcoming "Young African Research AI Fellowship," designed to support up to three Indaba participants for a full-time, research-based residency.

Continuing Education & Resources

The 2024 Indaba provided continuing education opportunities through its Research in Africa Showcase Day awards. Winners received access to long-term learning resources including Nvidia Instruction Led courses, GoMyCode Data Science Bootcamps, and comprehensive technical literature in Reinforcement Learning, Graph Neural Networks, and Mathematical Foundations. These resources were selected to support participants' ongoing development in specialised AI domains after the conference.

Supporting Future Talent

The Indaba plays an important role in developing capacity in AI in Africa. The community, as well as the event, is often pivotal in the continuation of studies for individuals, or, securing employment. While we know of these stories anecdotally, we are yet to systematically collect impact on our education development and this will be a focus over the next couple of years to better inform our initiatives.

Whilst we work tirelessly to reduce barriers to access to the Indaba, there are always factors which are more difficult to mitigate. As a result, we will work on a hybrid component in the future to support greater access to AI talent development. This will also help to increase our reach in any given year.

***In their words:** The Deep Learning Indaba also introduced me to opportunities I wouldn't have encountered elsewhere. I have gained access to mentorship programs, research collaborations, and even funding opportunities that have helped accelerate my career growth. The platform has given me the confidence to pursue ambitious projects, such as developing AI-based solutions for agriculture and assistive technologies, which have the potential to make a real difference in people's lives.*

—An Indaba Beneficiary



Strengthening African AI Research

Impact summary: We supported the advancement of novel research and dissemination through publications, where we established higher quality on a focussed set of 50 papers; the Africa Research showcase created visibility and opportunity for teams behind almost 250 research projects; and we distributed the Lacuna fund grant of approximately \$500k to 5 projects in African language technologies.

The Deep Learning Indaba strengthens Africa's AI research ecosystem by creating platforms for knowledge exchange, fostering collaboration and mentorship, and increasing the visibility of African AI research in the global community.

The 2024 Indaba in Dakar showcased the depth and breadth of African AI research through its Research in Africa Showcase Day program. The showcase featured original work spanning fundamental AI theory to practical applications in agriculture, healthcare, and African language processing. Senior researchers from leading institutions provided targeted feedback through structured review sessions, while dedicated networking events facilitated new research partnerships. The program particularly emphasised emerging research in responsible AI and climate applications, areas where African perspectives and solutions are critically needed. This combination of peer review, expert mentorship, and collaboration opportunities reinforced DLI's role in strengthening Africa's position in the global AI research community.

Publications

One of the core principles of the Deep Learning Indaba is to foster talent development and collaboration to promote research. This year the publication track included a pre-submission mentorship programme and journal extension for archival submission to AI for Social Good in Africa in a special volume proceedings at the International Joint Conference of AI (IJCAI). In 2024, owing to the novel journal extension component of the publications track, submissions were narrowed down to 48 submissions for review. Each paper received 2 reviews. A subset of these papers were submitted for archival journal submission to IJCAI's special volume. In addition to providing a pathway for archival research publications, the publication track offers authors mentorship and guidance for further development and non-archival publication. While in 2023, we received 80 submissions for the publication track, we observed an increase in the quality of submissions in 2024, with notably stronger methodological approaches and more robust experimental validations. Papers covered topics including Health with a focus on infectious disease surveillance in Africa, NLP applications, Climate and Environment, Geospatial ML and core ML model development, benchmarking and dataset creation.

Research in Africa Showcase

The Research in Africa showcase days continues to play a pivotal role in highlighting research on the continent. A total of 248 poster submissions, which included 8 on African datasets, were received, covering healthcare (especially infectious diseases and maternal health), natural language processing for African languages, environmental/agricultural applications, core ML research, social impact projects, and infrastructure development, with a strong focus on African contexts and low-resource settings. Each presenter received audience feedback through a peer review process, fostering knowledge sharing and helping early-career researchers build confidence and develop their work further, as reflected in this attendee feedback:

“Presenting my research at the conference allowed me to receive constructive feedback from peers and experts in the field. This feedback is crucial for refining my methodologies and identifying areas for improvement or expansion. It has helped me look at my research from different angles, improving its overall quality and impact.”

Special Poster Mentions

- Physics-Informed Neural Networks for Inverse Atmospheric Problem
- Machine Learning Analysis of Radio Data to Uncover Community Perceptions on the Ebola Outbreak in Uganda
- TangaleNLP : Parallel Corpora and Machine Translation System for Digital Inclusion

The Research in Africa showcase also included dedicated sessions on African datasets and African startups, expanding the platform for continent-specific innovation. The African datasets session featured predominantly Natural Language Processing resources, complemented by collections in healthcare, food, and speech recognition domains.

Workshops

An open call for workshops enabled community deep dives into research themes actively contributing to the African AI research ecosystem. The program featured established workshops in computer vision, language, and robotics—demonstrating sustained research communities—while introducing new workshops in climate AI and computational neuroscience. These workshops combined expertise from invited speakers, organisers, and attendees. Three workshops included paper submission tracks, providing vital platforms for early career researchers. Notable contributions included Danielle Tsemo's work on flood prediction and forecasting in the AfriClimate AI workshop, and research on bio-inspired neural architecture search currently under ICLR 2025 review.

Lacuna Fund Grants

The Indaba specifically was a recipient of a grant from the Lacuna fund that aims to support African language data sets and resources. These funds support 4 specific projects, on machine translation, Nigerian language data sets (Naija Voces), Portuguese data resources, and Domain Adaptation. For each of these, a key recipient is the Masakahane Research foundation, being the leading community for African natural language processing. This grant is related to our charitable aims since it directly supports the research and work on African languages and researchers that will enter the public domain, and enables the future independent working of organisations like Masakahane.

Supporting Future Research

We have taken a broad approach to supporting research at every level. And the successful completion of all the programmes we described in this section show that we now have the track-record to successfully deliver and shape all forms of research incubation and delivery. Supporting future research then will be driven by using these tools and partnerships to shape coherent, and pressing research agendas. This thematic focus on research support will allow us to use resources well to show the significant value of new research and overall strengthen African AI research.

***In their words:** My first encounter with the Deep Learning Indaba was in 2019 when I attended a mini IndabaX at the Nelson Mandela African Institution of Science and Technology (NM-AIST). The event was incredibly inspiring and sparked my interest in AI research and its potential to solve local challenges. Since then, I have been actively involved in organizing and participating in IndabaX events, and in 2023, I had the honor of having my work selected to represent IndabaX Tanzania at the main annual event.*

—An Indaba Beneficiary

Strengthening African AI

Innovation

Impact summary: We strengthened the pipeline of ideas to deployment by showcasing innovation and commercialisation from 69 startups across the continent, hosting startup showcases and pitch sessions, and embedding the role of company building in Africa's AI ecosystem; the Ideathon helped accelerate new cross-continental collaborations that are the seed for future startups and innovations.

Our approach to supporting innovation in AI continues to evolve rapidly, driven by an unprecedented diversity of deployment scenarios across different sectors and use cases. Rather than prescribing fixed pathways, we've chosen to actively foster this organic development, creating flexible support structures that strengthen local innovation ecosystems and enable the development of novel applications that address emerging challenges.

Start-up showcase

At the 2024 Deep Learning Indaba, our “*African Startup Session: Strategies, Challenges, and Opportunities for Emerging Companies*” created a strategic platform for AI innovation in Africa. The session brought together 12 emerging companies with industry leaders and investors, featuring insights from established African AI companies including GoMyCode, SunBird AI, Lelapa AI, and Lengo AI. Through structured panels and pitch sessions, participating startups – ranging from fintech to environmental technology – gained direct access to expertise and potential partnerships, advancing our mission to strengthen Africa's AI ecosystem.

We had 69 representatives from startups invited to present a short pitch at the session. In an effort to surface the visibility of local startup networks, we have created a [repository](#).

Ideathon Programme

The Ideathon programme invited Indaba participants to propose a fundamental-research or applied project including a machine learning component. Our model of the Ideathon follows principles of microfunding, bridging African AI talent with critical resources to develop their proposals from idea to early results/prototype. This programme also encourages collaboration and team with members from multiple countries to establish international bonds and learning opportunities.

Following on from the success of the previous 2 years' Ideathon, this year we continued this flagship project with a few important differences aiming at:

- Scalability
- Even more structured and realisable ideas
- More research
- More exposure for proposals and winners

2 phases:

- Meet and form teams at the Indaba
- Detailed ideas and competition after the Indaba

In 2024, we received 29 applications, 5 of which were fundamental research. This has increased from 2023 where we received 22 applications and 2 in fundamental research. 17 teams were enrolled for mentorship leading up to and during the Indaba 2024 week. During this mentorship session, the teams received feedback on the feasibility and potential impact of their ideas, and guidance on potential ways to refine it.



After the Indaba, 21 teams were also matched with mentors leveraging the Deep Learning Indaba Mentorship Programme. The goal of this second mentorship is to work deeper on the proposals in preparation of the official submissions.

The submissions were then in the form of 15 minute videos that were shared with the judges, and were followed by Q&A sessions. The evaluation of the pitches took into account 5 criteria: motivation and potential impact, feasibility, team composition and diversity, ethical considerations and roles distribution. This allowed us to select the following projects (winners are in no particular order):

- [Smart Wheat Yield Estimation Systems](#) Using AI Powered Quadcopter
- [MBEUNDD](#): Empowering Togo's Resilience in Flood prediction
- [Transparent Decision-Making for Electric Vehicle Routing](#): Integrating DRL, GNN, and XAI
- [Khétali](#): A digital school assistant for students
- [TQuick](#): Building an intelligent AI model to recognise African dishes from images and retrieve authentic recipes and cooking instructions

- [FarmA](#): Leveraging AI to create more inclusive and sustainable farming practices
- [AfriNet](#): Tackling Africa's severe weather data shortage by deploying low-cost, community-managed weather stations.

The winning teams were awarded prizes ranging from 10,000 Google Cloud Credits, cash prizes and developer courses. The teams have the opportunity to connect with mentors from the Deep Learning Indaba's mentorship network. Two teams have the chance to send an individual team member to the upcoming Indaba in Kigali, Rwanda

Impact from Past Ideathons

Amathambo AI

Amathambo AI started as an Ideathon project in 2023, and in 2024 returned having formed a startup and developing their solution with real partners and needs. Their [automated rostering solution](#) is being demoed by South African doctors in public hospitals across the country! The online platform allows doctors to generate optimal rosters for their specific staffing needs and download them for easy distribution to unit staff. Additionally, Amathambo has collected more than a year's worth of data in partnership with a public hospital in Gauteng, on which we are training predictive ML patient load models, with a new data site hospital launched in Cape Town in January. See their [video update](#) for more information.

This group has gone on to achieve a great deal already, including:

Awards/fellowships/accelerators:

- Entrepreneur First programme (Sicelukwanda Zwane), UK, 2024
- Winner of the Äänit Prize for social impact ventures, Mandela Rhodes Foundation, 2023 (Kira, \$38000)
- Ideathon winners, DLI, Tunis (\$10 000 Google Cloud Credits), 2022

Invited talks:

- DLI Senegal [African start-ups session 20 min opening presentation], 2024
- Global Fellowships Forum on Artificial Intelligence [African AI industry context panel discussion], Canada, 2024
- SABC News Late Edition [Segment on Äänit prize and women in tech], South Africa, 2023
- DLI Ghana [Ideathon showcase panel discussion], 2023
- DLI Ghana [Building a global network of AI researchers on AI and the United Nations SDGs workshop: Panel discussion], 2023

Features:

- UCL Foundational AI website/newsletter, 2024
- DLI Ideathon website, 2023

Non-Intrusive Fish Weighing

This team has identified a challenge that fish researchers (ichthyologists) face optimising fish growth and ensuring their overall well-being by adjusting feed proportions. This relies on regular fish weighing, however, the current method of manually grabbing fish from their natural habitat for weighing induces significant stress, which leads to the release of stress hormones such as adrenaline and cortisol. Therefore, the team identified a need for a non-invasive, accurate, and efficient method of monitoring fish weight and growth that minimizes stress and contamination risks, thereby promoting sustainable aquaculture practices. See this video update on the [non-intrusive fish weighing](#) project.

The data is being collected through an IoT system that consists of cameras installed in a pond provided by Zambia Research and Development Centre (ZRDC). These cameras continuously film the fish and store the data in a designated database. The pond contains two subspecies of Tilapia, and the system has been in operation since May 2024. To collect ground truth data, *the team is currently funding a partnership with fish weighing specialists, themselves.*

The team has also produced preliminary results, using object detection and bounding boxes to approximate the size of the fish, with a regression model to infer a fish weight from an input in centimetres.

Exposure. The teams presented their progress update at the 2024 Deep Learning Indaba in Senegal. The team were selected for the [GPAI scalable solutions](#) programme providing mentorship that profoundly enhanced the team's understanding of research in action principles, engagement with stakeholders, and readiness to advocate for responsible aquaculture innovations.

Next steps. The team is working towards a publication, and the Ideathon team is in the process of matching them with a mentor from the DLI network to continue supporting their goals.

Supporting Future AI Innovation

We intend to continue supporting innovation in these ways through refining both the startup showcase and the Ideathon. These are distinct ways to support different modes of innovating. And we continue to integrate these programmes with other elements of our work, like the mentorship programme, the IndabaX and the annual Indaba, and in this way allow impacts in one area to spread to other areas. As with other impact areas, we are limited by resources to support these innovators and innovations and continue to seek creative ways to provide resources for these ideas.



Strengthening African AI

Ownership & Capacity

Impact summary: New technical communities have been identified or established in 47 countries across the continent, achieving the goal of setting the foundations for AI readiness, ownership and capacity at a continental-scale.

The IndabaX programme arose out of the desire to enable more people to learn and benefit from the type of opportunity that the annual Deep Learning Indaba made possible. If that model could be reproduced at a country level, then that would enable more skills and learning, and in our vision increase dramatically the number of people who are able to contribute and have ownership in the way AI would influence and be used in countries across Africa.

A Deep Learning IndabaX is a locally-organised Indaba that helps spread knowledge and builds capacity in machine learning and artificial intelligence in individual countries across Africa. In 2018, we supported 13 IndabaX events that were run locally in different countries across Africa, and this past year, saw us reach 47 countries. Our vision has always been to represent and influence AI ownership and capacity in every country on the continent, and we are close to achieving that goal with new IndabaX entrants for 2025 being Gabon, Seychelles, South Sudan & São Tomé and Príncipe.

IndabaX across the Continent

Forty-seven countries were selected to host IndabaX events in 2024 are listed below, although three (3) did not take place due to organisational and funding concerns. Organising teams were asked to send short proposals outlining their plans for their event, where they had to describe the content, how they would do outreach, ensure broad attendance, a budget and any other support they needed. Our budget is always limited in this programme, and we are able to support these events with small grants of up to \$2000—our ability to increase this amount is the key challenge for this programme.

1. **Algeria.** Hosted an event in May 2024 with an estimate of 100 attendees and hosted at École Nationale Supérieure d'Informatique and in partnership with Bigmama Technologies. A highlight of their event was that after the success of the IndabaX 2024 edition some sponsors have already reached out and expressed their interest in sponsoring the next IndabaX Algeria edition.
2. **Angola.** The event was set to be hosted in October 2024 with an estimate of 100 attendees and was to be hosted at Universidade Agostinho Neto (UAN). The event was later postponed due to lack of availability of limited funds.

3. **Benin.** Hosted an event in November 2024 with an estimate of 150 attendees and hosted at University of Abomey Calavi. A highlight of their event was that it happened for three days, the first and third day being fully virtual (held on Zoom) and the second day being a hybrid of physical and virtual meeting. The first day was mainly keynote talks, while the second day was mainly practical and workshops. The third day was keynote talks as well as the announcement of the winners of the 24 hour hackathon.
4. **Botswana.** Hosted an event in July 2024 with an estimate of 150 attendees and hosted at Botswana International University of Science & Technology, Spectrum Analytics. The first day was about talks by invited speakers for the whole day and on the second day, 2 workshops were held running in parallel for a half day.
5. **Burkina Faso.** Hosted an event in April 2024 with an estimate of 300 attendees and hosted by Tech Emerging Africa by Brain Machine & Consensus. In terms of gender proportions, for the opening and closing, IndabaX Burkina Faso had roughly at least 30% young ladies (pictures seem to show a lot of them), for the hackathon, they had a 50/50 at the finals.
6. **Burundi.** Hosted an event in July 2024 with an estimate of 100 attendees and hosted at University of Burundi.
7. **Cameroon.** Hosted an event in June 2024 with an estimate of 150 attendees and hosted at University of Garoua.
8. **Cape Verde.** Hosted an event in November 2024 with an estimate of 100 attendees and hosted at Universidade de Santiago.
9. **Central African Republic.** This was to be the first time to host an event. The event ultimately did not happen due to challenges in organisation; we aim to re-engage for the next round to see this eventually come to fruition.
10. **Chad.** Hosted an event in October 2024 with an estimate of 150 attendees and hosted at University of N'Djamena.
11. **Comoros.** Hosted an event in July 2024 with an estimate of 150 attendees and hosted by Comor'Lab.
12. **Cote d'Ivoire.** Hosted an event in October 2024 with an estimate of 150 attendees and hosted at University Felix Houphouët.
13. **DR Congo.** Hosted an event in September 2024 with an estimate of 150 attendees and hosted at UNIVERSITE CATHOLIQUE DE BUKAVU.

14. **Egypt.** IndabaX Egypt 2024 was set to happen virtually, organised by Algorithm tech but did not take place due to unforeseen circumstances.
15. **Equatorial Guinea.** Hosted the IndabaX 2024 event in January 2025 with an estimate of 100 attendees and hosted at Afro American University of Central Africa.
16. **Eswatini.** Hosted an event in August 2024 with an estimate of 200 attendees and hosted at University of Eswatini.
17. **Ethiopia.** Hosted an event in May 2024 with an estimate of more than 300 attendees and hosted at Adama Science and Technology University.
18. **Gambia.** Hosted an event in July 2024 with an estimate of 100 attendees and hosted at University of The Gambia.
19. **Ghana.** Hosted an event in July 2024 with an estimate of more than 300 attendees and hosted by Responsible Artificial Intelligence Lab (RAIL) at Kwame Nkrumah University of Science & Technology
20. **Guinea.** Hosted an event in October 2024 with an estimate of more than 50 attendees and hosted by CAPRESCOM
21. **Guinea-Bissau.** Hosted an event in April 2024 with an estimate of over 300 attendees and hosted at Universidade Lusófona de Guiné-Bissau in partnership with Universidade Jean Piaget de Guiné-Bissau, Université Amílcar Cabral.
22. **Kenya.** Hosted an event in August 2024 with an estimate of 300 attendees and hosted at Dedan Kimathi University.
23. **Lesotho.** Hosted an event in June 2024 with an estimate of 200 attendees and hosted at Botho University.
24. **Liberia.** Hosted an event in July 2024 with an estimate of 100 attendees and hosted at The College of Engineering, University of Liberia, iLAB .
25. **Madagascar.** Hosted an event in December 2024 with an estimate of 100 attendees and hosted by LIAM (Laboratoire d'Intelligence Artificielle de Madagascar) in partnership with SmartPredict, UST-IO University, GET-IT University, MIT (Mention Informatique, Technologie) Madagascar. .
26. **Malawi.** Hosted an event in July 2024 with an estimate of 150 attendees and hosted by tnyasa ltd at Malawi University of Business and Applied Sciences.

27. **Mali.** Hosted an event in November 2024 with an estimate of 300 attendees and hosted by Robotsmali.
28. **Mauritania.** Hosted an event in December 2024 with an estimate of 150 attendees and hosted by Hadina RIMTIC.
29. **Mauritius**
This was to be the third time to host an event in Mauritius. The event ultimately did not happen due to challenges in organisation; we aim to re-engage for the next round to see that the third IndabaX event takes place.
30. **Morocco**
Hosted an event in June 2024 with an estimate of 150 attendees and hosted at Al Akhawayn University.
31. **Mozambique.** Hosted an event in November 2024 with an estimate of 150 attendees and hosted at UNISCED, Parque Nacional de Ciencias e Tecnologia – Maluana.
32. **Namibia.** Hosted an event in July 2024 with an estimate of 300 attendees and hosted at UNAM.
33. **Niger.** Hosted an event in November 2024 with an estimate of 300 attendees and hosted by Drone Service Niger .
34. **Nigeria.** Hosted an event in June 2024 with an estimate of 200 attendees and hosted at MIVA University .
35. **Republic of Congo (Brazzaville).** Hosted an event in July 2024 with an estimate of 100 attendees and hosted at Centre National De Formation En Statistique, Démographie Et Planification (Cnfsdp) Ex Casp .
36. **Rwanda.** Hosted an event in June 2024 with an estimate of 200 attendees and hosted by Digital Umuganda and C4IR at UR (The African Centre of excellence in Data Science)
37. **Senegal.** Hosted an event in November 2024 with an estimate of 300 attendees and hosted at Amadou Mokhtar Mbow University (UAM)
38. **Sierra Leone**
This was to be the first time to host an event in Sierra Leone. The event ultimately did not happen due to challenges in organisation; we aim to re-engage for the next round to see this eventually come to fruition.

39. Somalia

Hosted an event in August 2024 with an estimate of over 200 attendees and was hosted in Mogadishu.

40. South Africa

Hosted an event in July 2024 with an estimate of over 300 attendees and hosted by Deep Learning IndabaX SA at Science Stadium, University of Witwatersrand.

41. Sudan

The event ultimately did not happen due to challenges in organisation and the political tensions that currently exist; we aim to re-engage for the next round to see this happen virtually in 2025.

42. Tanzania. Hosted an event in October 2024 with an estimate of 150 attendees and hosted by Tanzania AI Lab & Community

43. Togo. Hosted an event in July 2024 with an estimate of 100 attendees and hosted by BERIIA in partnership with the University of Lomé , University of Kara, UCAO and IPNeT

44. Tunisia. Hosted an event in May 2024 with an estimate of over 300 attendees and hosted by IEEE Sup'Com Student Branch at Sup'Com.

45. Uganda. Hosted an event in July and August 2024 with an estimate of over 300 attendees and by Deep Learning IndabaX Uganda at Silver Springs Hotel.

46. Zambia. Hosted an event in November 2024 with an estimate of over 50 attendees and hosted by Zambia AI Community and Family Development Initiatives.

47. Zimbabwe. Hosted an event in August 2024 with an estimate of 200 attendees and hosted by Dapbruc Analytics.

Supporting Future AI Ownership

The IndabaX is of significant importance in developing continental AI capacity, talent, ownership, and is the site of fundamental innovation for African AI now and in the future. As such our path towards supporting future ownership is clear, and includes continued investment in the existing IndabaX leaders and communities, increasing the funding we are able to provide them, enabling new tools for learning across languages and levels of knowledge, and to make the important work that is showcased at these events more visible and able to be developed to greater maturity.

Strengthening African AI

Leadership

Impact summary: The Indaba awards, which honour African scientific and intellectual luminaries, celebrated and elevated the pioneering work of researchers and innovators in the four Indaba awards, recognised and showcased the breadth of leadership and excellence that already exists.

The Indaba awards provides a recognition of research and impact excellence by those based at African institutions. This form of recognition is a critical component of recognising existing leadership at all levels of experience across the AI ecosystem and creates visibility for these emerging and current leaders. The awards are an important component of achieving charity objectives in recognising AI in Africa, and ensuring that the work associated with these leaders is shared more widely.

Annual Indaba Awards

We continue to build the tradition and profile of the Indaba awards programme. The recipients of these awards are chosen through a nomination and review process that involves assessing nomination statements, letters of reference, external review, and ranking the candidates. Awards are given in four categories,

Grace Alele-Williams Masters Dissertation Awards

The Alele-Williams Masters Award recognises, celebrates, and celebrates excellence in research and writing by masters candidates at African universities, in any area of computational and statistical sciences. Its recipients are those that uphold Grace Alele-Williams' legacy as a defender of learning, champion of academic excellence, and activist for access to education.

Winner

Ms Fiskani Banda from the University of Pretoria, South Africa.

Dissertation summary: In Sub-Saharan Africa, small-scale farmers often struggle without proper resources. Fiskani's MSc thesis investigates and creates a relevant dataset for South African farmers, using an automated approach with large language models to overcome the limitations of traditional annotation methods. Despite a small dataset, prompt-based fine-tuning shows promise for few-shot learning, effectively capturing domain-specific multilingual data, suggesting a viable path for future applications with limited data.

Reaction: "I am deeply humbled to be recognized with the Alele-Williams Masters Award. It is through pioneers like Prof. Alele-Williams that women throughout Africa

can continue pushing boundaries in STEM. This is a privilege that I am grateful to hold and will continue to be motivated by.” Fiskani said.

Runner-up

Ms Jacobie Mouton from Stellenbosch University, South Africa.

Dissertation summary: Jacobie’s research integrates Bayesian networks with variational autoencoders (VAEs) to enhance their interpretability and performance, particularly in scenarios with limited data. She developed a novel graphical normalizing flow, improving VAEs by incorporating conditional independence into their architecture. This approach resulted in a more interpretable model that performs better in data-sparse environments and offers competitive density estimation and inference capabilities, along with more reliable inversion.

Reaction: “I feel honoured to be considered as the runner-up for the Alele-Williams Masters award, and to me it underscores the importance of dedication and passion in academic pursuits. This recognition inspires me to continue pushing the boundaries in my current role driving high-performing, robust and fair machine learning solutions in industry.” Jacobie said.

Thamsanqa Kambule Doctoral Thesis Award

The Kambule Doctoral Award recognises, encourages, and celebrates excellence in research and writing by doctoral candidates at African universities, in any area of computational and statistical sciences. Its recipients are those that uphold Thamsanqa Kambule’s legacy as a defender of learning, a seeker of knowledge, and activist for equality.

Winner

Dr. Irene Nandutu, Rhodes University, South Africa

Thesis Summary: Dr. Nandutu’s work uses artificial intelligence techniques to address the widespread issue of wildlife-vehicle collisions in South Africa, a growing concern due to the lack of technical, practical solutions. In her doctoral thesis, Dr Nandutu developed an ethical framework for AI-driven wildlife monitoring and proposed an error-correction neural network to analyse complex animal road-crossing patterns. Her work can significantly reduce wildlife-vehicle collisions, improve road safety, and protect biodiversity.

Reaction: Dr Nandutu commented: “I am honoured and thrilled to win the 2024 Kambule Doctoral Award. I sincerely thank the selection committee for recognizing my work. This recognition is truly a privilege and motivates me to enthusiastically dedicate myself to my research at the University of Cape Town.”

Runner-up

Branden Ingram from University of the Witwatersrand, South Africa.

Thesis Summary: Dr Ingram's work leverages recent advances in machine learning to develop complex games like Go and StarCraft. Branden's thesis addresses the challenges of whether these models can be used to enhance human performance by creating an end-to-end pipeline that provides tailored advice for players in a video game setting. Throughout his PhD journey, Branden also discovered a passion for teaching. Engaging with students and witnessing their growth fueled his desire to pursue a career in academia, culminating in his current role as a Lecturer at University of the Witwatersrand.

Reaction: "This achievement, although individual, is a testament to the incredibly supportive and collaborative atmosphere that we have fostered together in the RAIL lab. Myself, together with my colleagues in the lab are looking to tackle a wide range of projects which involve my primary interest in AI in games but also Robotics as well as fundamental and applied Reinforcement Learning." Dr Ingram said.

The Cheikh Anta Diop Research Award

The Anta Diop Award recognises, encourages, and celebrates excellence in research, teaching and community service by early to mid-career academics and researchers at African universities, in any area of artificial intelligence, and computational and statistical sciences. Its recipients are those that uphold Cheikh Anta Diop's legacy as a multidisciplinary scientist and visionary intellectual.

Winner

Dr. Chala Merga Abdissa, from Addis Ababa University, Ethiopia.

Research Summary: Dr. Chala Merga Abdissa currently works in the areas of neural networks and control algorithms for robots (UAVs, Mobile Robots and Rehabilitation Robots) including developing and implementing advanced neural network algorithms to enhance robotic control systems. His research and development efforts aim to improve the autonomy, precision, and efficiency of robots in various applications such as agriculture and health systems, contributing to advancements in robotics and artificial intelligence.

Reaction: Dr. Abdissa commented "The Cheikh Anta Diop award inspires me to continue pushing the boundaries of technology, and striving for excellence in creating intelligent systems that can transform industries and improve lives."

Runner-up

Dr. Neema Mduma, from the Nelson Mandela African Institution of Science and Technology, Tanzania.

Research summary: Her projects focus on developing ML datasets for crop diseases, deep learning tools for detecting diseases in common beans, banana and Irish potatoes, and tools for climate change adaptation in maize and common beans. She founded BakiShule, an initiative promoting STEM education among Tanzanian girls.

Reaction: “I am deeply honoured to be selected as the runner-up for the Cheikh Anta Diop Early to Mid-Career Award at the Deep Learning Indaba 2024. This recognition reflects the dedication and hard work of myself and my team in applying emerging technologies like AI and ML to transform agriculture, health, education, and more.”

The Wangari Maathai Impact Awards.

The Maathai Impact Award recognises and celebrates work by African innovators, thinkers, and advocates that show impactful work — including but not limited to technical, societal, environmental, and economic — around machine learning and artificial intelligence. This award reinforces the legacy of Wangari Maathai in acknowledging the capacity of individuals to be a positive force for change: by recognising ideas and initiatives that demonstrate that each of us, no matter how small, can make a difference.

Winner

Grace Muthoni Kaimburi from University of Eastern Africa Baraton, Kenya.

Impact summary: The journey of Emission Pulse started with a simple dream: to make people take better care of our environment. At the core of this project is Grace's aspiration to show people that their actions do matter and encourage everyone to take responsibility and get involved in environmental initiatives. Grace brought together a dedicated team to create an emission measurement system for cars in Kenya as hopes to scale to other African Countries. Emission Pulse is CO₂ emission meter system developed by the team, is a project driven by the passion to use technology to make a positive impact on our environment. Driven by the curiosity to understand the carbon emissions of hybrid and manual cars in Kenya, the team is developing a CO₂ emission meter system that is easy to use and install on any car. Emission Pulse provides real-time emissions information of cars anywhere and anytime. The system offers precise analysis and prediction of individual emission trends, helping numerous stakeholders make informed decisions about policies, manufacturing, and choosing more environmentally friendly transportation options.

Reaction: “Our project exemplifies how technology can drive significant change, providing accurate data and insights to combat climate change. This recognition fuels our commitment to expanding our research and continuing to innovate for a greener future.” said Grace Muthoni Kaimburi.

Runner-up

The 2024 Wangari Maathai Impact Award runner-up goes to Annine Duclaire Kenne, from Johannes Kepler University, Austria.

Impact summary: Her project called “Subseasonal Prediction of Summer Temperature in West Africa Using Artificial Intelligence” enhances the accuracy of subseasonal temperature forecasting using cutting-edge ML technology. Combining work from climate science and cutting-edge AI tools, the project tackles environmental issues in Africa. This includes comprehensive data gathering and the development of specialized machine learning models for weather prediction. These forecasts are vital for agricultural, water resource management, and disaster preparedness in West Africa. Its significant impact lies in aiding local decision-making, fostering food security, and enhancing disaster response.

Reaction: “Winning the Maathai award for this work on subseasonal temperature prediction is a tremendous honor. It underscores the critical role of artificial intelligence in tackling climate challenges and highlights the collaborative effort behind this success.”

Young African AI Researcher Award

In 2024, we experimented with the introduction of a new award type, to recognise an outstanding AI researcher. The award was given to Brenda Anague for her work on *Model Calibration and estimation of Air Pollution Sources using Physics Driven Deep Learning Approach*. The aim of this award was to elevate a young researcher whose work was showcased at the Indaba, and to elevate the critical role of excellent research in supporting Africa’s needs. This award creates opportunities through visiting research fellowships to advance the work of recipients.

Supporting Africa’s AI Leaders

A large part of the awards programme is about leadership recognition. But the larger focus on leadership development remains equally important. Every programme run by the Deep Learning Indaba has a focus on leadership development. We think about this task of leadership development along four dimensions, and we have made cumulative advances in all areas over the years:

- **Country-based leadership opportunity.** Through the IndabaX programme there is a direct drive for leadership opportunities by the call to host these events. It is because of this focus on opportunities, that this specific programme has seen leaders be established in 47 countries, and in a swathe of distinct research areas.
- **Leadership skills and competencies.** Leadership skills development requires opportunity for practice, as well as support and feedback. This is supported by the mentorship programme, by the specific support from IndabaX leads, and through the opportunities these leaders have when they attend the annual Indaba each year. In addition, the workshop programme creates an opportunity for a different set of field-specific leaders to become visible, advance their technical agendas, and build a community to drive advancement and impact.

The competencies here include organisational and operational thinking, people management, fundraising and budget management, as well as opportunity-making and stakeholder management.

- **Leadership growth.** These leaders create their own growth path by taking on more complex organisational challenges. We support his growth through the mentorship programme, bringing these leaders into contact with other leaders to lift their standards, and creating opportunities for international collaboration where they can learn world-class skills. This creates wider development and growth for the groups involved, supporting the overall ecosystem.
- **Leadership recognition.** As we described in this section, the work of the Indaba awards programme is to recognise those at the top of their fields. But recognition also is given to individual leaders in countries across the continent to support their work, and that recognition is essential since it shows the kinds of leaders that exist and inspires more leaders to follow in their footsteps, creating the foundations for long-lasting AI communities and talent bases across the continent.

***In their words:** Through the Indaba, I've built strong networks with researchers and institutions across the globe, some of whom have become lifelong mentors and collaborators. More than just professional connections, I've developed close relationships with fellow attendees, many of whom I now consider family.*

—An Indaba Beneficiary



Strengthening African AI Communities

Impact summary: We've established the platform that brings together Africa's leading innovation groups across fields particularly in Languages, Vision, Health, and Climate; hosted sessions to connect leaders of community groups supporting leadership development; and invested in the visibility of community groups to help advance their own missions and impacts.

Our efforts in community building reach back to the origin of the Deep Learning Indaba. We have always recognised the important role of grassroot communities in propelling specialised African AI research agendas. The Indaba continues to serve as a platform for these communities, leveraging our network of researchers, practitioners and donors to build together. This year we welcomed for the first time members of Galsen AI in Senegal, Queer in AI and AfriClimate AI, with continued presence from communities such as Masakhane, DSN, Zindi, ML Collective, Sisonke Biotik, Black in AO, WiMLDS and Ro'ya CV.

The launch of our dedicated online Community Hub marked a major step forward in our community-building efforts. This messaging-based platform has already attracted 150 active participants and serves as a centralised space for ongoing discussions and resource sharing. The Hub has become particularly valuable for groups like Masakhane and AfriClimate AI, supporting their annual meetings and facilitating year-round engagement.

Looking ahead, we are focusing on expanding the Community Hub's resources and training offerings for community leaders. Regular follow-up webinars are planned to maintain momentum and address emerging needs within our communities. We are also implementing systems to track and measure the impact of these initiatives, ensuring our efforts continue to serve the growing needs of African AI communities effectively.

Community at Indaba 2024

In preparation for the 2024 Indaba, we hosted two pre-event webinars focused on building connections between community leads and preparing participants for meaningful engagement. These sessions attracted 50 attendees and successfully established stronger alignment among community leaders while creating a platform for sharing strategies and initiatives.

During the Indaba, the Community Showcase became a centerpiece of our community-building efforts. More than ten community groups presented their initiatives, goals, and achievements, sparking active discussions and cross-community

networking. Notable participation came from established groups like WIMLDS and Queer AI, demonstrating the diversity and inclusivity of our AI community landscape. A significant milestone was our panel discussion on building sustainable communities, which addressed crucial topics such as resource mobilisation, engagement strategies, and leadership development. The discussion highlighted success stories and practical solutions to common challenges faced by AI communities across Africa.

The success of these community-strengthening initiatives reflects our commitment to fostering a collaborative, sustainable AI ecosystem across Africa. Through continued support and engagement, we are building a foundation for long-term growth and innovation in African AI communities. Below we show the set of affiliated communities we partner with.



In their words: The Indaba's focus on nurturing African talent and fostering a supportive AI community has been instrumental in shaping my vision of creating solutions that address local challenges. I am grateful to the Indaba for continuously creating a space where researchers like myself can thrive, learn, and grow, and I look forward to contributing even more to this incredible community in the years to come.

—An Indaba Beneficiary

By Strengthening the Indaba Organisation

Impact summary: We continue to make progress in building an extraordinary organization to support the impacts and future ambition: by professionalising our internal processes, actively managing risks, and having a strategy for more ambitious and transformative approaches to Strengthen African AI.

Ingoing and greater impacts require a strong organisation and leadership. In this way we continue to improve all aspects of our governance and operations. Ultimately, we are on a trajectory to see that Indaba can sustainably move across a 10x scaling curve, form an organisation that redirects funding from \$10k to \$1m to eventually \$10m. These funding levels describe both different types of organisational structures the Indaba will have to move through, but also a clear ambition in the scope and scale of the charitable programmes that can be delivered by the Indaba. The Indaba is now in this middle phase, and like every year, has made further changes to support the ambitions and needs of the Charity.

- **Board governance.** The Board of Trustees is more active and maintains more oversight of finances and operational, while giving specific attention to the changing landscape and the needs of our beneficiary communities. Board succession is more actively considered, risks to our mission logged and reviewed, and a longer-strategic view is taken.
- **Strategic aims.** Plans are actively considered for what the second decade of the Indaba's impact should be, with a framework for the next few years to 2027, and ways of diversifying funding.
- **Financial Risk Management.** As the amount of funds that is raised and disbursed through our programmes increases, there is greater need for more advanced financial management oversight. Our work involves a significant amount of international transfers and to small and early stage non-profits and community groups. As a result there is more engagement with countries on the register of high-risk countries that need a more sophisticated and standardised approach. We have better record keeping and more verification of partner organisations. We keep abreast of sanctions status, and improve our access to financial services, and review our policies.
- **People and culture.** We continue to improve the structure of teams and the way we engage with the large number of volunteers that allow us to keep our programmes at the high standard they have come to be known for. This involves continued experimentation with committee structure, continued investment in collaboration tooling, thinking about the onboarding of new people and improving the understanding of the overall organisation and aims.

- **Fundraising and Donations.** We continue to drive fundraising to support these breadth of impacts and programmes we run. In 2024, we reached a target to raise \$700k+ that would fund our activities for the year. The major expense is the annual Indaba and these costs are increasing, while changing donations landscape adds new risks to our funding streams. As such, we are shifting to establish donor relationships with multi-year support, expanding the diversity of donors, while as always continuing to maintain a lean cost-basis.
-

Overall Summary

2024 was a year of growth, but we have had clear and meaningful impacts in all areas of work. We are immensely thankful to all our supporters, funders, volunteers, and leaders who make this work possible. The Deep Learning Indaba continues to hold a unique place in the African AI landscape, and it remains clear that the impacts we have had would not have been achieved in other ways, and that emphasises the ongoing importance of our mission to Strengthen African AI.

***In their words:** Although I wasn't able to attend the main Deep Learning Indaba until 2023 in Ghana, the experience has been truly life-changing. These past two consecutive Indabas have provided me with invaluable feedback that has significantly improved the quality of my research. The thoughtful insights and discussions at these events inspired me to conduct more impactful, localized research aimed at solving pressing challenges in Africa, for Africans, and beyond.*

—An Indaba Beneficiary

Appendix

Volunteers

Volunteers and those who give their time in service of Africa and her peoples are the lifeblood of the Indaba's work. We thank all of them for their service and for being living exemplars of the spirit of Ubuntu that is one of our core values.

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Our donors are essential to our mission and we thank them for enabling our work and impact. Details of funding levels are available in the [2024 prospectus](#).

MAWENZI



NILE



CONGO



ZAMBEZI



LIMPOPO



SENEGAL



SALOUM



End Matter

Xam Xamle: Impact Report for
the Deep Learning Indaba 2024

Issued: March 2025

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