

## Preface: Proceedings of IndabaX Nigeria 2026

We are pleased to present the proceedings of **IndabaX Nigeria 2026**, published as Volume 319 of the *Proceedings of Machine Learning Research (PMLR)*. These proceedings showcase peer-reviewed research presented at IndabaX Nigeria 2026, held under the theme:

*Building Scalable AI That Works: From Research to Deployment in Resource-Constrained Environments*

IndabaX Nigeria is part of the broader **Deep Learning Indaba** movement, a pan-African initiative dedicated to strengthening machine learning and artificial intelligence research, education, and innovation across the continent. Through community-driven engagement, capacity building, and collaborative research, IndabaX events provide a platform for advancing AI solutions that address African challenges while contributing to global scientific progress. It seeks to strengthen AI research, education, and innovation across Africa.

The papers in this volume reflect the growing maturity of AI research within Nigeria and across Africa. They span diverse topics including resource-efficient machine learning, computer vision, natural language processing, cultural AI, federated learning, trustworthy AI, healthcare applications, agriculture, and AI for social good. Collectively, these contributions demonstrate the importance of developing AI systems that are scalable, context-aware, and responsive to local needs.

### Review Process and Statistics

To ensure the high scientific standards expected of PMLR publications, all submissions underwent a rigorous double-blind peer-review process coordinated by the Program Committee and managed through the conference management system.

IndabaX Nigeria 2026 received a total of **176 submissions**. Following peer review, **32 papers** were accepted for publication, representing an acceptance rate of **18.2%**. Each submission received at least **2 independent reviews**, with additional evaluations conducted for borderline papers where necessary.

The accepted papers span the following thematic areas:

- Resource-Constrained and Green AI
- Computer Vision and Remote Sensing
- Natural Language Processing and Cultural AI
- Federated Learning, Privacy, and Trustworthy AI
- Healthcare and Biomedical AI
- AI for Agriculture and Sustainable Development
- Data Science and Applied Machine Learning

## Acknowledgments

We sincerely thank all authors who submitted their work to IndabaX Nigeria 2026 and the reviewers, Program Chairs, and Program Committee members whose expertise and dedication ensured a rigorous and constructive review process.

We are especially grateful to the **IndabaX Nigeria Organizing Committee** for their tireless efforts in planning and delivering the conference. We also acknowledge the invaluable support of **Data Science Nigeria (DSN)**, whose continued leadership has significantly strengthened Nigeria's AI ecosystem.

We also acknowledge the broader Indaba community, whose commitment to strengthening African AI inspires collaboration, innovation, and excellence across the continent.

Finally, we acknowledge the Editors and staff of the **Proceedings of Machine Learning Research** for their guidance throughout the publication process.

We hope that the research presented in this volume will inspire further innovation, collaboration, and responsible AI development across Africa and beyond.

**Dr. Sakinat Oluwabukonla Folorunso**

Lead Editor, PMLR Volume 319

Team Lead, IndabaX Nigeria 2026

On behalf of the IndabaX Nigeria 2026 Organizing Committee

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The quality of the manuscripts published in this volume reflects the rigorous double-blind review process carried out by our international technical committee. We sincerely thank the following reviewers for their expertise, commitment, and valuable contributions.

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