

Shongo On'osala Aaron

Artificial Intelligence And Machine Learning Engineer & Researcher

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PROFESSIONAL SUMMARY

Results-driven Artificial Intelligence And Machine Learning Engineer with a strong foundation in mathematics and physics. Skilled in leveraging data-driven insights to solve complex challenges, specializing in Artificial Intelligence, Machine Learning, Data Science and Data Analysis with a proven track record of delivering impactful solutions through data analysis. Polyglot with exceptional analytical and problem-solving abilities. Experienced in leading projects in Artificial Intelligence and data-driven fields, with a commitment to continuous learning and innovation

WORK EXPERIENCE

Revive Battery B.V

AI Automation Intern | Remote

Amsterdam, North Holland, Netherlands

Aug 2025 – Nov 2025

- Developed and deployed 15+ intelligent automation workflows utilizing AI, machine learning, and low-code tools, resulting in a 30% reduction in operational manual processes and saving over 200 man-hours monthly.
- Optimized decision-making frameworks by integrating predictive analytics within automation systems, which increased process accuracy by 25% and accelerated response times by 40%.
- Led cross-functional collaboration to tailor automation solutions aligned with Revive Battery's sustainability goals, contributing to a 15% extension in battery lifespan and supporting the company's mission to minimize waste through innovative technology implementations.

Nobel Learning PBC

Operation Team Member | Remote

Gaithersburg, MD, USA

Nov 2024 – June 2025

- Optimized database management processes, resulting in a 20% increase in system efficiency and a 15% reduction in data retrieval time.
- Spearheaded compiler work to streamline code compilation procedures, leading to a 30% decrease in errors and a 25% improvement in overall software performance.
- Resolved technical issues related to mail and discord management, achieving a 95% customer satisfaction rate and reducing troubleshooting time by 40%.
- Managed key aspects of mastering operations, including quality control and process improvement, leading to a 10% decrease in defects and a 20% increase in overall product quality.
- Oversaw major events for the company, coordinating logistics for conferences and trade shows with attendance numbers exceeding 5,000 participants, resulting in increased brand visibility and networking opportunities.
- Maximized production processes at the Nobel learning factory by implementing new efficiency measures, resulting in a 15% increase in output and cost savings.
- Coordinated international logistics for major events, facilitating opportunities for young leaders to network, share experiences, and build impactful cross-border partnerships.

VOLUNTEERING WORK EXPERIENCE

Coalition for Advancing Research Assessment (CoARA)

Researcher

Non-profit Organization

Oct 2024 - Present

- Developed comprehensive Ethics and Research Integrity Policy (ERIP) frameworks that established standardized ethical guidelines for AI-driven research, resulting in a 40% reduction in ethical compliance issues during internal reviews.
- Collaborated with over 15 organizations to design and implement innovative assessment tools promoting responsible data use and AI integration, increasing stakeholder engagement by 60%.
- Led the creation of scalable policies that aligned diverse research methodologies, facilitating the coordination of multi-sector collaborations across 10 institutions and enhancing research integrity standards across the ecosystem.

AI for Good

Young AI Leader

Kampala Hub

Mar 2025 - Present

- Led efforts to promote inclusive technological development by organizing cross-sector discussions with 20+ industry leaders and researchers, boosting awareness of socially responsible AI practices across participating organizations by 30%.

Recyclux

AI & Computer Vision Engineer | Remote

Bucharest, Romania

Jul 2025 – Jan 2026

- Engineered advanced computer vision pipelines integrating Sentinel-1 SAR and Sentinel-2 multispectral imagery, achieving a 35% improvement in detection accuracy of marine plastic hotspots across diverse environmental conditions, thereby enabling more precise hotspot mapping.
- Developed scalable algorithms optimized for Google Cloud infrastructure that processed over 10 terabytes of satellite data daily, increasing system throughput by 150% and facilitating near real-time marine pollution monitoring capabilities.

- Designed and validated geo-referenced outputs including confidence maps and hotspot overlays leading to a 40% reduction in false positives and enhancing the robustness of marine plastic detection systems used in global ecological restoration initiatives.

Tribu World

AI Developer | Remote

Barcelona, Spain

May 2025 – Nov 2025

- Engineered and deployed AI-driven conversational agents and recommendation systems, increasing community engagement metrics by 40% and facilitating over 1,000 meaningful connections between members within the platform's first year of implementation.
- Collaborated with cross-functional teams to design smart matchmaking tools that optimized project-member matches, resulting in a 25% improvement in successful collaborations and enhancing overall platform user satisfaction scores by 15%.
- Contributed to the development of scalable AI features aligned with community needs, supporting digital transformation initiatives for over 50 NGOs and educational institutions globally, thereby expanding platform reach by 60% during a six-month period.

PROJECT EXPERIENCE

Makerere AI Lab

Artificial Intelligence Engineer

Kampala, Uganda

May 2024 – Jun 2024

- Developed advanced computer vision models using machine learning techniques to accurately classify maize diseases and detect cocoa fruit stages, resulting in a 99.6% accuracy rate.
- Collaborated with Makerere AI Lab to enhance the development process of the computer vision models, leading to a 30% decrease in model training time.
- Utilized Python programming language to implement innovative solutions for practical agricultural challenges, ultimately improving student learning experiences by 40%.

Yango Group, International Tech & Transportation Company

Data Scientist | Remote

Kinshasa, DR Congo

Nov 2023 - Dec 2023

- Developed and fine-tuned a machine learning model using Python and time series analysis to accurately predict traffic speeds in Kinshasa, resulting in a 15% increase in route optimization and ETA predictions for Yango's ride-hailing service.
- Collaborated with Yango group an international tech and transportation company to gather real-time data on traffic patterns, leading to a 20% improvement in the accuracy of the machine learning model.
- Utilized advanced data visualization techniques to present findings on traffic speed predictions, facilitating better decision-making processes within the executive team at Yango.

SKILLS

✓ Artificial Intelligence	✓ Critical Thinking	✓ Deep Learning
✓ Machine Learning	✓ Generative AI	✓ Natural Language Processing
✓ Data Science	✓ Tableau	✓ Digital Image Processing
✓ Data Analysis	✓ Python	✓ LLM
✓ Domain Expertise	✓ SQL	✓ Team work
✓ Problem Solving	✓ TensorFlow	✓ Adaptability

LEADERSHIP & OTHER AFFILIATIONS

Co-Founder and Community Leader, AI Community

ISBAT University

Kampala, Uganda

Feb 2023 – Jan 2025

- Established a vibrant AI community that connected over 200 students and professionals from diverse backgrounds, enabling them to collaborate on innovative projects and explore cutting-edge advancements in artificial intelligence.
- Facilitated workshops and networking events, fostering skill development and collaboration within the AI field.
- Guided community members in leveraging AI technologies to address real-world challenges, resulting in impactful solutions across various sectors.
- Advocated for the ethical use of AI to ensure and address fairness in systemic inequalities through data-driven insights and solutions.

EDUCATION

Bachelor of Science in Artificial Intelligence and Machine Learning

ISBAT University

May 2022 – Nov 2025

- First Class Honours
- CGPA of 4.86 /5
- Academic Excellence Award winner

Higher Education Certificate In Information Technology

ISBAT University

May 2021 – Feb 2022

- First Class Honours
- CGPA of 4.41 /5

Diplôme D'État in Mathematics and Physics

Collège Maele

Aug 2019

- CGPA of 65 /100

PUBLICATION & RESEARCH

1. **Harnessing the Power of Advanced Deep Learning Techniques for Early Detection and Classification of Maize Leaf Diseases in Uganda**, International Journal of Business and Emerging Technologies (IJBEST), 2025. **Presented at the 9th National Conference on Communications (NCC-2025): Harnessing Digital Innovation to Power Sustainable Local Solutions for Uganda's Development Goals, October 02 – 03, 2025.** Focuses on leveraging deep learning models for the early detection and classification of maize leaf diseases, aiming to improve agricultural productivity and food security in Uganda.
2. **Automated Feature Engineering and Optimal Feature Selection for Regression Models: A Case Study Using OpenFE**, International Journal of Business and Emerging Technologies (IJBEST), 2025. **Presented at the International Conference on Impact of Disruptive Technologies on Business World: Challenges and Opportunities in Africa, November 14 – 15, 2024.** Explores the application of automated feature engineering and feature selection techniques for improving the performance of regression models in machine learning tasks.

TRAINING & CERTIFICATIONS

- [The Fight against Corruption](#) | United Nation | October 2025
- [Advanced Anti-Corruption: Prevention of Corruption](#) | United Nation | October 2025
- [Responsible AI for Developers: Interpretability & Transparency](#) | Google Cloud | November 2024
- [Introduction to Data Science](#) | Cisco Networking Academy | August 2024
- [Machine Learning Operations \(MLOps\) for Generative AI](#) | Google Cloud | September 2024
- [Generative AI Concepts](#) | DataCamp | August 2024
- [Data Analytics Essentials](#) | Cisco Networking Academy | April 2024
- [Generative AI Productivity Skills](#) | Microsoft & LinkedIn Learning | August 2024
- [Microsoft Azure Responsible AI](#) | Microsoft Americas Azure Team | April 2024