

Shongo On'osala Aaron

Artificial Intelligence Engineer | Machine Learning Engineer | Data Scientist | Data Analyst

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PROFESSIONAL SUMMARY

Results-driven AI Engineer, Machine Learning Engineer, Data Scientist and Data Analyst with a strong foundation in mathematics and physics. Skilled in leveraging data-driven insights to solve complex challenges, specializing in Artificial Intelligence, Machine Learning, and Data Science 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

Nobel Learning PBC <i>Operation Team Member Remote</i>	Gaithersburg, MD, USA <i>Nov 2024 - Present</i>
<ul style="list-style-type: none">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.	
Machine Learning Engineer Intern Remote	<i>Jun 2024 – Dec 2024</i>
<ul style="list-style-type: none">Specialized in Digital Transformation and Emerging Technologies, collaborating with global teams across 5+ countries to implement AI-driven solutions, accelerating workflow automation by 30%.Engaged in Leadership Course and Practice sessions to enhance leadership abilities through practical exercises and real-world simulations, leading to a 30% improvement in team collaboration and decision-making.Implemented AI chatbot technology to streamline customer service interactions, leading to a 25% decrease in response time and an increase in customer satisfaction by 15%.Led and Facilitated machine learning, python and computer vision in Advance leadership practice to enhance technical skills and communication abilities, leading to a 15% improvement in overall performance.	
Google <i>Advanced Generative AI developer & Machine Learning Engineer Apprentice</i>	Remote <i>Sep 2024 – Feb 2025</i>
<ul style="list-style-type: none">Developed and fine-tuned advanced generative AI models, improving model accuracy by 15–20% through hyperparameter tuning and transformer-based architectures.Optimized machine learning pipelines, reducing data processing time by 30% and cutting model training costs by 25% using efficient preprocessing and distributed training.Collaborated with cross-functional teams to deploy AI solutions on Google Cloud, handling millions of data points and improving inference speed by 40%.Implemented machine learning algorithms to optimize operational processes, resulting in a 15% reduction in production costs.Analyzed data from advanced generative AI models to identify patterns and trends, leading to a 20% increase in predictive accuracy.Certified Google Cloud Innovator	

PROJECT EXPERIENCE

Makerere AI Lab <i>Artificial Intelligence Engineer</i>	Kampala, Uganda <i>May 2024 – Jun 2024</i>
<ul style="list-style-type: none">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%.	

- 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	✓ Communication skills
✓ Domain Expertise	✓ SQL	✓ Team work
✓ Problem Solving	✓ TensorFlow	✓ Adaptability

LEADERSHIP & OTHER AFFILIATIONS

On-Boarding Team Leader, Operation Team

Nobel Learning PBC

Gaithersburg, MD, USA

Jan 2025 – Present

- Led the onboarding of 20+ new members, streamlining the process to reduce activation time by 30%, ensuring operational efficiency and partner readiness.
- Managed and trained a team of 10+ onboarding specialists, improving workflow automation and increasing partner retention rates by 25% through enhanced engagement strategies.

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

ISBAT University

Bachelor of Science In Artificial Intelligence And Machine Learning | CGPA: 4.8

Kampala, Uganda

ISBAT University

Higher Education Certificate In Information Technology | CGPA: 4.4

Kampala, Uganda

College Maele

Diplome D'Etat In Mathematics And Physics | CGPA: 3.5

Kisangani, DR Congo

TRAINING & CERTIFICATIONS

Prompt Design in Vertex AI Skill Badge, Google Cloud | Nov 2024

Generative AI Productivity Skills, Microsoft & LinkedIn | Aug 2024

Introduction to Data Science, Cisco Networking Academy | Aug 2024

Large Language Model Operations (LLMs) Concepts, DataCamp | Aug 2024

Data Analytics Essentials, Cisco Networking Academy | Apr 2024

PUBLICATION & RESEARCH

- 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 International Conference on Impact of Disruptive Technologies on Business World: Challenges and Opportunities in Africa, November 14 – 15, 2024. 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.
- 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.