

Professional Summary

A passionate and dedicated scientist with 6 years of experience in STEM education, data science, technology, and mathematics. Proven track record in leading STEM initiatives, conducting scientific research, and mentoring young scientists, particularly women and underrepresented groups. Adept at fostering collaborations, developing innovative curricula, and driving impactful scientific projects. Committed to advancing global scientific knowledge and inspiring the next generation of STEM leaders.

Professional Experience

Director of Laboratory for Innovation and Research

iRise Hub Mogadishu, Somalia | 2023 – Present

- Oversaw the development and execution of innovative research projects in STEM fields.
- Managed laboratory operations, including procurement of equipment and consumables.
- Provided technical training and support on advanced lab equipment.
- Facilitated collaborations with local and international research institutions.

Head of STEM Learning, Simad iLab, Mogadishu | December 2022 – February 2023

- Developed and revised STEM standards and curricula to align with global best practices.
- Collaborated with universities, districts, and stakeholders to design and implement STEM initiatives.
- Led and managed STEM-related activities and events, fostering innovation and creativity.
- Mentored and inspired students, particularly young women and underrepresented groups, to pursue STEM careers.
- Researched and compiled information on effective STEM programs to enhance educational outcomes.

Scientific Officer

Mogadishu University, Mogadishu, Somalia | January 2022 – November 2022

- Oversaw East Africa academic exchange programs and Somali talent training programs.
- Fostered partnerships and collaborations with local universities and research institutions.
- Provided technical support for international events, including science lectures, exhibitions, and field visits.
- Prepared detailed scientific reports in Somali and English.
- Provided secretarial services to committees and working groups.

Science Facilitator

Africa integrity studies Nairobi, Kenya | 2021 – 2022

- Designed and delivered engaging STEM education programs for students and educators.
- Conducted workshops and training sessions to enhance STEM teaching methodologies.
- Developed educational materials and resources to support STEM learning.

Mathematician (Contract)

IRDA Institute - Mogadishu, Somalia, May 2020 - April 20221

- Created original problem sets and scenarios to test AI models' mathematical reasoning capabilities.
- Evaluated AI-generated responses for accuracy, relevance, and style.
- Collaborated with a team to improve AI models' mathematical problem-solving abilities.
- Provided feedback and suggestions to enhance AI performance in mathematical domains.

Founder

Mogadishu Science Engagement Center, Mogadishu, Somalia | 2021 – Present

- Established a center to promote science education among kids and youth.
- Organized workshops, science fairs, and hands-on activities to inspire interest in STEM.
- Developed programs to address educational gaps and foster innovation in underserved communities.

Lab Assistant (Science Lab)

Buruuj technical School Nairobi, Kenya | 2019 – 2021

- Prepared and set up laboratory equipment and materials for experiments.
- Conducted routine laboratory tests and maintained accurate records of results.
- Operated and maintained lab equipment, ensuring compliance with safety protocols.
- Maintained a clean and organized laboratory environment.

Data Associate

IMPACT Initiatives, Mogadishu, Somalia, 2018-2019

- Developed and managed data collection tools for monitoring development programs.
- Designed data management solutions to enhance data analysis and reporting.
- Produced visual aids, dashboards, and reports to communicate research findings.

Short-Term Consultancies

- Conducted a district-based political economy analysis of the 16 districts of Mogadishu for the **Community-Driven Recovery and Development (CDRD) Project**. This supported DRC and the CDRD project in understanding the power structures influencing Mogadishu's STEM education landscape, identifying entry points for interventions.
- Coordinated a mid-term evaluation for **Life & Peace Institute** in Somalia and Congo, in partnership with **Stockholm Policy Group (SPG)**. This involved field visits, development of FGD questionnaires, and screening of interview materials.
- Led a comprehensive functional review for the **Ministry of Interior and Federalism (MoIFA)** with the support of **SSF**. The review proposed key structural and functional reforms to enhance the ministry's operational efficiency.

Education

- **Master of Data Science**, Mount Kenya University, Nairobi, 2025
- **Diploma in Full Stack Development**, Rise Academy, Mogadishu 2023
- **Certificate in Sustainable Development and Social Innovation**, Jamhuriya University, Mogadishu, 2022
- **Bachelor of Statistics and Planning**, Mogadishu University, Mogadishu, 2022
- **Diploma in English Language**, Mogadishu University, Mogadishu, 2019
- **Diploma in Sustainability and Climate Policy**, IRDA Institute, Mogadishu, 2018
- **Diploma in Information Technology**, Jamhuriya University, Mogadishu, 2016

Technical Skills

- **Programming Languages:** HTML, CSS, JavaScript, PHP, Python
- **Web Development:** React, Node.js
- **Database Management:** MySQL, PostgreSQL
- **Data Analysis Tools:** SPSS, STATA, RStudio, Excel, Power BI, Tableau
- **Monitoring & Evaluation Systems:** ODK, CSPro, SurveyCTO
- **GIS & Data Visualization:** Advanced proficiency
- **STEM Education:** Curriculum development, mentoring, and program management

Awards and Fellowships

Employee of the Year Award

- Recognized as the recipient of the Employee of the Year Award for exemplary performance and significant contributions to the mission of the Buruu technical School in 2021.

Awareness 360 Fellowship

- Selected for a prestigious 10-month program aimed at cultivating 21st-century skills and advancing social impact initiatives aligned with the Sustainable Development Goals (SDGs). Program conducted remotely from March 2024 to present.

KECTIL Youth Leadership Program

- Participated in the KECTIL Youth Leadership Program, a prestigious initiative aimed at nurturing leadership skills and fostering global connections and leadership skills for advancing climate resilience. The program was conducted remotely from January 2024 to the present.

Conference & Forum Participation

- Speaker & Panelist – Mogadishu Tech Summit 2024 (Focus on youth for the future of science)
- Facilitator – EmpowerHer Innovation Challenge Bootcamp (Climate & Gender-Based Solutions)
- Participant – Somalia Youth Policy Development Forum (AI & Sustainability Policy)

Membership & Engagement

- Network of African Science Academies
- African Youth Initiative on Climate Change (AYICC)

Research Interests

- **Climate Change and Air Pollution:** Investigating the connection between food production, consumption patterns, and greenhouse gas emissions.
- **Applied Mathematics:** Focused on partial differential equations and kinetic theories, including the Boltzmann equation for rarefied gases.

Languages

- English (Fluent)
- Somali (Native)
- Chinese (Intermediate)
- Italian (Proficient)