



ALTON V. KESSELY

Educator, Data Analyst, and Research Scientist

An immensely dedicated and committed professional with a strong background as an educator, mathematician, research scientist, and meticulous data analyst, boasting over eight years of valuable experience. Keen to employ well-honed analytical abilities to tackle intricate challenges while delivering strategic leadership and adept management.

EDUCATION

- University of Cape Town
Cape Town, South Africa
Masters in Applied Mathematics
Completed in 2015
- African Institute for Mathematical Science
Stellenbosch University
Cape Town, South Africa
Masters in Mathematical Science
Completed in 2013
- University of Science and Technology of China
Hefei, China
Masters in Astronomy
Completed in 2011
- University of Abuja
Abuja, Nigeria
Bachelor in Physics
Completed in 2007
- Code with Mosh, Udemy, LinkedIn Learning, and SuperdataScience
Certificates in Git, HTML, CSS, JavaScript, React JS, Python, Django and Machine Learning
Completed in 2024

CONTACT

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Monrovia, Liberia

PROFESSIONAL EXPERIENCE

- Deputy Minister for Planning, Research and Development
Ministry of Education-Liberia

February 2018 – January 2024

Key responsibilities:

- Designing, developing, managing, and coordinating the policies, procedures, and activities for the review and update of national education plans;
- Ensuring that the developed plans align with national development priorities and objectives;
- Facilitating the development of the plan, design, and construction schedules of all education facilities;
- Facilitating the development and implementation of a management information system that will include, but not be limited to, educational statistics, national demographics records, etc.;
- Spreading the development, review, revision, pilot testing, and updating of the national curriculum for all levels of education;
- Serving as the principal liaison between the Ministry of Education and the Ministry of Finance and Development Planning, as well as with the donor community and both domestic and international institutions involved in education;
- Serving as the clearinghouse for all Education Development activities;
- Being responsible for the monitoring, and evaluation of all Education Plans and their implementations,
- Being responsible for the supervision of construction, renovation, and expansion of schools and other education facilities.
- Being responsible for Policy evaluation and appraisals.

ACHIEVEMENTS

● 2018 – 2023

- Provided great leadership of multi-stakeholders, leading to highly Successful donor engagement and fostering meaningful policy dialogue, leading to a compact with the Global Partnership for Education.
- Raised over USD 300 million in direct donor support for education.
- Provided direct supervision for all of the Ministry of Education projects, including the large portfolio of development partners-supported projects and programs worth over USD 200 million.
- Led the development of Liberia's new Education Sector Plan and education sector analysis.
- The successful digitization of Educational Data collection tools for Liberia.
- Led the successful conduct of the Annual School censuses for 2019–20, 2020–21 and 2021–22.
- Established School Quality Standards.
- The Establishment of a National Literacy and Numeracy Assessment System for Grades 3 and 6.
- Led Liberia's Education response to the Covid-19 pandemic.

● 2017 – 2018

- Successfully launched the Liberia Institute for Science, Technology, Engineering and Mathematics after being dormant since its formation in 2016.

● 2015– 2016

- Carried out disaster risk assessment for Liberia's education sector.
- Developed a workable plan for providing education in emergency
- Worked on a plan for how Science, Technology, Engineering and Mathematics education can be made a priority in Liberia.

- Executive Director
Liberia Institute for Science, Technology, Engineering and Mathematics

March 2017 – February 2018

Key responsibilities:

- Led the commitment of the Institute to promoting quality STEM education, Research, and Innovation in Liberia;
- Fostered partnerships with government, non-governmental organizations, private businesses, educational institutions; community leaders, and civil society organizations for the promotion of STEM education and research in Liberia,
- Promoted, Honed, and enhanced the Skills of Liberians in STEM through mentorship and scholarships;
- Created a culture of STEM-based research and innovation across schools and institutions across Liberia;
- Carried out and participated in various STEM-related education and innovative initiatives;
- Encouraged, promoted, and facilitated the culture of interdisciplinary research between STEM and non-STEM disciplines;
- Organized seminars, workshops, training, public forums, and debates for the purpose of raising awareness and imparting skills and knowledge of STEM.

- Instructor Of Physics and Mathematics
University of Liberia

*October 2016 – February 2018,
August 2011–August 2012*

Key responsibilities:

- Taught Undergraduate Mathematics and Physics courses,
- Undertook research projects;
- Provided academic guidance for students;
- Carried out professional activities as specified by the Department of Physics and the Department of Mathematics.

- Disaster Risk Analyst and STEM Specialist
Ministry of Education–Liberia

June 2015 – October 2016

Key responsibilities:

- Carried out Disaster risk assessments for Liberia's education sector,
- Developed a workable plan of how to provide education in Emergencies,
- Worked on a comprehensive plan of how STEM education can be made a priority in Liberia.

- Physics and Mathematics Teacher
Firestone High School
Harbel, Liberia

March 2007–July 2007

Key responsibilities:

- Prepared Lesson plans,
- Taught High School Physics and Mathematics,
- Evaluated Students,
- Provided mentorship for students.

- Marketing Officer
Based Brothers Inc
Lagos, Nigeria

January 2006–January 2007

Key responsibilities:

- Sought Clients for the company's products (Window blinds and furniture) and Persuaded them to buy the company's products;
- Built and nurtured customer relationships through effective communication and engagement.

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TOP SKILLS

● Hard Skills

- Data modeling and reporting
- Data mining and analysis
- Statistics
- Machine and Deep Learning using Scikit-Learn, Tensorflow, and Pytorch
- Advanced knowledge in Computer Programming (Python, Pandas, JavaScript, Latex, and R)
- Proficiency in the use of Spreadsheets (Excel, Numbers, Calc) for Data Analysis
- Policy formulation and development
- Monitoring and Evaluating
- Data Visualization using Plotly, Matplotlib, Seaborn, Chart.js, Tableau, and Power BI
- Database Management using MySQL or PostgreSQL
- Cloud Computing using cloud platforms using AWS, Google Cloud or Azure
- Dashboard creation with Plotly Dash and Streamlit

● Soft Skills

- Observation
- Decision Making
- Communication
- Multi-tasking
- Strategic leadership
- Good interpersonal skills
- Team building skills
- Critical thinking
- Adaptability
- Time Management
- Creativity
- Collaboration and Teamwork
- Conflict Resolution
- Mentoring and Coaching
- Resilience
- Networking
- Attention to Detail
- Ethical Judgment
- Analytical Skills