

ALMAZ KIDANEMARIAM

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ENVIRONMENTAL SCIENTIST

Team Leadership | Project Management | Environmental Issue Identification & Resolution

Dynamic professional with strong analytical mindset and vast experience in crafting and delivering impactful solutions for environmental challenges, including heavy metal mobility and dam management. Possesses extensive research expertise in soil and sediment quality, pollution prevention, and bioremediation. Passionate about providing data-driven insights that improve environmental outcomes. Well-versed in developing and maintaining interactive dashboards using Power BI, DAX, and data visualization techniques to support business decision-making processes. Proven ability to design and implement responsive web applications using HTML, CSS, JavaScript, React.js, and Java, to ensure seamless user experience across devices.

- ✓ **Bioremediation Projects:** Led projects utilizing biological methods for pollution detection and prevention, such as analyzing heavy metal absorption patterns in wild berry leaves using ArcGIS, SPSS, and Excel.
- ✓ **Research Focus:** Conducted extensive research on environmental impact of pollutants in soil and sediment, with specific focus on heavy metals' mobility in reservoir sediments and environmental challenges in dam management.
- ✓ **Cosmetics Sales Analysis:** Collaborated on data cleaning and modeling for cosmetics sales, creating dashboards to track cosmetics brands' performance and sales trends.
- ✓ **Life Skills Training:** Orchestrated workshops for 50 high school students, boosting readiness for future challenges.

AREAS OF EXPERTISE

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| ❖ Environmental Impact Research | ❖ Scientific Research & Consulting | ❖ Full Stack Development |
| ❖ Laboratory Experiment Design | ❖ Environmental Regulations Compliance | ❖ Power BI & Data Visualization |
| ❖ Sustainable Waste Management | ❖ Stakeholder Engagement | ❖ High-Quality Software Solutions |
| ❖ Data Analysis & Statistical Modeling | ❖ Scientific Writing & Reporting | ❖ Cross-Functional Collaboration |

PROFESSIONAL EXPERIENCE

Memorial University of Newfoundland | Canada

05/2022 – 09/2022

Research Assistant

Collaborated with multidisciplinary teams to craft effective waste management strategies, contributing to environmental sustainability initiatives and minimizing ecological footprint. Conducted data analysis, enhancing accuracy of environmental research projects.

- Executed comprehensive research on sustainable waste management, significantly improving compost production techniques from sea and fish waste.
- Designed laboratory experiments and composting models, performing statistical analyses that refined research outcomes.

Arba Minch University | Ethiopia

09/2014 – 09/2016

Lecturer

Spearheaded development and administration of rigorous assessments, pioneering fair evaluation standards for large student cohorts. Fostered vibrant class discussions, empowering students to think critically and delve deeper into chemistry concepts, earning acclaim from students for transformative teaching methods.

- Prepared course materials in Environmental Chemistry, Toxicology, Atmospheric Chemistry, Air Pollution, Industrial Waste Management, and Water Treatment, ensuring quality education for bachelor students.
- Taught over 80 university students per semester, with five chemical engineering students achieving perfect scores.
- Revolutionized undergraduate chemistry education by directing undergraduate chemistry courses and research projects, raising student engagement through innovative teaching methodologies and curriculum creation.
- Served as dedicated mentor to over 140 students annually, guiding each individual through seminar projects and theses, resulting in realizing 80% enhancement in project completion rates and academic performance.
- Conceptualized and administered three university research projects annually, yielding one scholarly publication each year and elevating department's academic reputation.

Arba Minch University | Ethiopia

09/2011 – 09/2012

Graduate Assistant

Facilitated laboratory courses for undergraduate chemistry students, emphasizing data collection and analysis techniques. Designed and outlined teaching materials and laboratory activities, enriching learning experience.

- Managed dynamic class discussions and delivered informative lectures, harnessing student engagement and propelling comprehension of complex chemistry concepts.
- Prepared and implemented assessments, including exams and laboratory activities, ensuring robust evaluation of undergraduate students' knowledge and skills.

PROJECT EXPERIENCE

Change in Time Series in Regional Distribution of Cd

- Carried out assessment of environmental pollution by utilizing passive biomonitoring techniques with Rubus Armeniacus leaves, leading to increased awareness and actionable strategies for pollution mitigation.

Conflict Caused by Construction of Gilgel Gibe III Dam, Ethiopia

- Analyzed environmental and social impacts of Gilgel Gibe III Dam construction, providing insights that contributed to understanding and addressing community conflicts related to infrastructure projects.

Effect of Different Biochar Types and Amounts on Soil Microbial Protease and Urease Activity

- Investigated effects of various biochar types and quantities on soil health and enzyme activity.

Heavy Metal Pollution Analysis

- Determined spatial and temporal trends of heavy metal pollution from steel industries using wild berry leaves as bioindicators, offering critical insights for environmental policy formulation.
- Utilized advanced analytical tools, such as ArcGIS, SPSS, and Excel to perform data analysis, enhancing reliability of findings.

Hydropower Socio-Economic Impact Study

- Carried out analysis of socioeconomic impacts of hydropower projects in Ethiopia, focusing on energy democracy and global energy governance, leading to recommendations for sustainable energy production and distribution practices.
- Presented findings to stakeholders, influencing policy discussions regarding energy management.

EDUCATION

Doctor of Philosophy - PhD, BEAS, Memorial University, Newfoundland and Labrador (ongoing)

MSc in Environmental Sciences, University of Trier, Germany

Thesis: Assessment of the potential mobility of selected heavy metals from unpolluted catchment reservoir sediments, in the case of Riveris Reservoir, Trier, Germany.

MSc in Water and Wastewater Treatment, Addis Ababa University, Ethiopia

Thesis: Assessment of Cyanobacterial Blooms Associated with Water Quality Status of Lake Chamo, South Ethiopia" (Published)

BSc in Chemistry, Mekelle University, Ethiopia

PROFESSIONAL DEVELOPMENT

Full Stack Development Bootcamp (2024)

Certifications: CPR, AED, and First Aid | **Executive Assistant Skills**, Alison
SQL Essential Training, LinkedIn

VOLUNTEER EXPERIENCE

Translator/Interpreter (Volunteer), One Water Blue (05/2020 – Present) | | Translate scientific papers related to water science from English to Tigrinya and Amharic, aiding in the dissemination of important information to non-English speaking audiences. Interpret English for Tigrinya and Amharic speakers in medical and healthcare settings during patients' appointments, enhancing communication between patients and healthcare providers.

TECHNICAL SKILLS

Data Analysis: Power BI (three years) | DAX | Reporting | Visualization | R-statistics (two years) | Origin-Pro | SPSS

Microsoft Office Suite (10 years): Word | PowerPoint | Excel

Geographic Information Systems (GIS): ArcGIS (two years)

Web Development: HTML | CSS | JavaScript | React.js | Java | SQL | AWS | Spring Boot

LANGUAGES

Tigrinya & Amharic (Native) | English (Advanced) | German (Basic)