

BUKHOSI NGQABUTHO KHUMALO

Block 41/1343, Mpopoma, Bulawayo

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Date of Birth: 22/September 1993

Date of Availability: As soon as possible

Place of Birth: Lupane

Present Salary: None

POST-SECONDARY EDUCATION

- **MSc Cartography and Geo-Informatics, Perm State University, Russia** ([Link](#)) 2020-2022

Thesis: “Modelling of water erosion risk of Umzingwane Catchment Area for Integrated Water Resources Management”

Final grade: First class (5)

Top 5%

- **BSc Geography and Population Studies , Lupane State University** ([Link](#)) 2014-2018

Thesis: “A time series modelling of soil loss using the Revised Universal Soil Loss Equation (RUSLE) in the Shake River Catchment, Gwanda District, Zimbabwe”

Final grade: First class (1)

Top student

RELEVANT WORK EXPERIENCE

Lupane State University, Zimbabwe

29 September 2022- Present

Part time Lecturer: I am effectively teaching courses such as Principles of GIS, Research Methods, Climatology and Meteorology, Introduction to GIS and Remote Sensing , Environmental Impact Assessment and Land degradation and reclamation. I am also supervising over 7 undergraduate research projects.

Perm State University GIS Center, Russia ([Link](#))

January- April 2022

Intern: As an intern at the PSU GIS Center I worked on a random forest model to predict forest cover disturbances using a Google Earth Engine Python API (Geemap). I gained skills such as machine learning, Python programming, Google Earth Engine and Statistica

Dabane Water Workshops, Zimbabwe ([Link](#))

Aug 2016-Jul 2017

Geographic Information Systems intern: I managed spatial databases, conducted soil erosion modelling, performed spatial data analysis using Arcmap and QGIS, monthly Vegetation monitoring, developed environmental management plans, conducted social and technical surveys, facilitated community trainings on climate change, gender and environmental conservation works, worked with geography clubs in schools and wrote activity, monthly and annual reports.

- **Ministry of Primary and Secondary Education, Lupane, Zimbabwe** Jan -Aug 2014
I effectively taught grade 7 and grade 4 classes at Gegema and Jotsholo Primary schools respectively.

RESEARCH EXPERIENCE & INTERESTS

I have an undergraduate and post graduate research experience in soil erosion modelling using empirical models and geospatial technologies. My current research interest include the use of machine learning models for biodiversity monitoring, climate change impact modelling and prediction of dangerous hydro meteorological hazards.

PERSONAL SKILLS.

I possess excellent organizational, communication, teaching, and ethical decision-making skills. Able to establish and maintain effective working relationships with colleagues and stakeholders. I'm able to exercise the judgment, determination, and creativity necessary in situations involving the achievement of measurable goals.

ICT SKILLS

Spatial database management (PostGIS), Spatial Data Analysis (ArcMap, QGIS, Python, R, Arcpy, ENVI, Easy Trace, SAGA GIS), Cloud computing (Google Earth Engine), GIS Web development (Geoserver, GitHub, Open Layers, HTML, JAVA and CSS), Graphic designing (Photoshop, Illustrator, Indesign, Davinci Resolve), Microsoft office, Statistical analysis (SPSS, Stat Graphics, Statistica)

HONORS AND AWARDS

- Russian Red Diploma after attaining 100% distinctions in MSc Cartography and Geoinformatics 2022
- Department of Cartography and Geo-informatics hall of fame for distinct achievements 2021
- Best graduating student in Geography and Population Studies , Lupane State University 2018
- Two university book prices, Lupane State University 2018
- Vice Chancellors Price, Lupane State University 2018
- Better Schools Program Zimbabwe (BSPZ) Award 2014

LANGUAGES

Fluent in English, Mother Language: Ndebele and other languages include Russian and Shona.

INTERESTS AND HOBBIES

Networking, YouTubing, Researching, Teaching, public speaking, rural soccer development

MEDIA COVERAGE

- 05-05-2019 Sunday News- Lupane based soccer academy grows. ([Link](#))
- 10-05-2019 B-Metro – Lupane Junior teams soccer gala ([Link](#))
- 15-10-2020 Community Podium- Boost for Lupane education group ([Link](#))

REFEREES

Lupane State University

Chairperson – Dept. of Geo and Geo-Information Science

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Perm State University

Lecturer

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Dabane Trust

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