



Paul Okwija Mugume

Kampala, Uganda

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Personal Information

Nationality Ugandan
Date of Birth 26th February, 1999
Gender Male
Languages English, Luganda, Rutooro

Education

Makerere University

Makerere, Kampala, Uganda

BSC. IN ELECTRICAL ENGINEERING

Aug. 2018 - Feb. 2023

- CGPA of 4.68.

St. Mary's College, Kisubi

Kisubi, Wakiso, Uganda

UGANDA ADVANCED CERTIFICATE OF EDUCATION (UACE)

2016 - 2017

- Studied Physics, Mathematics, and Chemistry.

Skills

P. Languages Python, C++, SQL, LaTeX
Other Tools Github, Wandb, Overleaf

Experience

SLB Uganda

Buliisa

WCM FIELD ENGINEER TRAINEE

January, 2024 - January, 2025

- Interpreted downhole data and collaborated with Directional Drillers, Geologists, and Company men to ensure job success.
- Quickly identified and addressed issues such as equipment failure, and signal issues during drilling operations.
- Operated and maintained MLWD surface systems and downhole tools before, during, and after drilling.
- Ensured timely delivery of high-quality well information, and daily client deliverables to support drilling efficiency and success.
- Maintained good client relationships and adhered to all safety rules and policies

UAP Old Mutual Insurance Uganda

Nakawa, Kampala

RISK ENGINEER

April, 2023 - December 2023

- Visited sites and properties insured or being on-boarded to collect information and assess and evaluate the risk of property loss or damage for underwriting purposes.
- Prepared underwriting and recommendation reports based on professional standards (NFPA, FM) detailing loss estimates (Probable Maximum Loss/ Estimated Maximum Loss)
- Tracked clients' progress and completion of risk improvement measures based on previous surveys and reports.
- Carried out desktop reviews in line with expected standards on underwriting and recommendation reports prepared by third parties.

Marconi Research and Innovations Lab

Makerere University

ML ENGINEER & RESEARCH ASSISTANT

September, 2022 -

- Developed machine learning (AI) models for cancerous lesion detection in cervix images to assist in cervical cancer screening.
- Developed a data solutions pipeline as part of an ICT platform for disease screening.
- Presented work and findings of research projects at Artificial Intelligence, Health, and Communication conferences and symposiums.

School of Engineering

Makerere University

TEACHING ASSISTANT: C++ PROGRAMMING

September, 2022 - April 2023

- Created and maintained a class web page to disseminate information and share classroom resources.
- Held practical programming sessions to supplement theory classes
- Created, gave out and assessed assignments while documenting student results

- Collected 2D ultrasound image dataset for computer vision task.
- Developed and trained machine learning models for needle detection and segmentation in ultrasound images.
- Integrated the detection models into a portable ultrasound device, Clarius L7, for real-time needle detection.

Honors & Awards

INTERNATIONAL

2022 **Global Finalist**, NASA Space Apps Challenge

Remote

References

Andrew Katumba, PhD

RESEARCHER, LECTURER

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Makerere University

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Cosmas Mwikirize, PhD

RESEARCHER, LECTURER

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Ronald Oyom

MLWD LEADOPS

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SLB Uganda

ronaldoyom@gmail.com

Presentation

Africa Cancer Test and Treat Initiative Conference 2023 by Ministry of Health, Uganda

Kampala, Uganda

PRESENTING A MOBILE-BASED TOOL FOR CERVICAL CANCER SCREENING USING MOBILE COLPOSCOPY IMAGES AND MACHINE

LEARNING MODELS

February 2023

- Presented ongoing research on using machine learning models and a mobile colposcope for cervical cancer screening.

NCC 2022 by Uganda Communications Commission and Makerere University

Kampala, Uganda

PRESENTER FOR A SMART PORTABLE ULTRASOUND SYSTEM FOR GUIDANCE OF MINIMALLY INVASIVE PROCEDURES

June 2022

- Presented ongoing research on using robust and accurate machine learning models integrated into a low-cost portable 2D ultrasound system for needle localization and segmentation.

IndabaX Uganda

Kampala, Uganda

PRESENTER FOR PRE-CANCEROUS LESION SEGMENTATION IN COLPOSCOPY IMAGES FOR CERVICAL CANCER SCREENING

Oct. 2022

- Presented ongoing research on using machine learning models and a mobile colposcope for cervical cancer screening.