**UNIVERSITY OF MINES AND TECHNOLOGY**

**TARKWA**

**FACULTY OF COMPUTING AND MATHEMATICAL SCIENCES**

**DEPARTMENT OF MATHEMATICAL SCIENCES**

A PROJECT REPORT ENTITLED

**MATHEMATICAL MODELLING OF THE TRANSMISSION DYNAMICS OF RIFT VALLEY FEVER**

BY

HURCHESON ASANTE OFORI

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF SCIENCE IN MATHEMATICS

PROJECT SUPERVISOR

……………………………….

DR EBENEZER LARBI ASIEDU

TARKWA, GHANA

SEPTEMBER 2025

# **DECLARATION**

I declare that this project work/thesis is my own work. It is being submitted for the Degree of Bachelor of Science in Mathematics in the University of Mines and Technology (UMaT), Tarkwa. It has not been submitted for any degree or examination in any other University.

……………………………………………..

(Signature of candidate)

……………….. day of ………………………………………… (year) ……………………..

# **ABSTRACT**

# **DEDICATION**

I dedicate this project work to the Almighty God, my Mum Stella Gyamfuah, Dr. Stella Agyemang Duah and all mathematics and machine learning enthusiasts.

# **ACKNOWLEDGEMENTS**

My sincere gratitude to the Most-High God who has given me grace and wisdom to complete this work. Also, I want to thank Dr. Ebenezer Larbi Asiedu, my project supervisor for his immense guidance, mentorship, and support throughout this project. I also want to express my appreciation to GNPC Foundation for their immense support offered through their scholarship scheme.

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