

FINAL YEAR PROJECT SYNOPSIS

(2025 – 2026)

PROJECT TITLE

Motorcycle Automated Safety System: An Improved Smartphone-Based Motorcycle Crash Detection and Emergency Alert System for Tanzania – Addressing Gaps in the Existing Over speeding Detection System.

INTRODUCTION

A previous final-year project which were done by the third year students from the program BCs of Computer Science in Software Engineering at Ruaha Catholic University titled “Motorcycle Taxi Over speeding Detection System”, a hardware-based system to detect when motorcycle riders exceed speed limits. While useful for speed monitoring, it does not address actual crashes or emergency alerting with location. This project fixes those gaps by developing a smartphone-only app focused on crash detection and instant emergency alerts and other advancements, which make it more suitable and helpful.

EXPECTED OUTCOME

A working Android app “Moto Safe” that overcomes the limitations of the existing system by providing reliable crash detection, GPS location sharing, offline alerts, and false alarm reduction making it more practical and life-saving for Tanzanian motorcycle riders which also known as Boda Boda.