

Title Registration Form

Faculty of Natural Sciences – Postgraduate Studies

Student Name: Thabo Molefe
Student Number: 3812456
Programme: PhD Computer Science
Department: Computer Science
Faculty: Natural Sciences
Registration Year: 2024

Proposed Thesis Title

"Machine Learning Applications in Healthcare Diagnostics: A South African Perspective"

Brief Description of Research

This research aims to develop and evaluate machine learning models for automated diagnosis of tuberculosis and diabetic retinopathy using medical imaging data from South African healthcare facilities. The study focuses on creating models that are robust to the specific imaging conditions and patient demographics found in the South African public health system, with particular emphasis on resource-constrained clinical settings.

Supervisor Endorsement

Supervisor: Prof. Sarah van der Berg
Co-Supervisor: N/A

I confirm that I have reviewed the proposed title and research description and consider it appropriate for a PhD-level study. The research topic is viable, the student has the necessary background, and appropriate supervision capacity is available.

Supervisor Signature: _____
Date: 10 March 2024

Faculty Approval

Dean / Delegate: _____
Date: _____