



BOKANG LEPOLESA

MECHATRONICS ENGINEERING

CONTACT

+27 64 950 8841

lepolesabokang3@gmail.com

121 Main Road, Claremont

Bokang Lepolesa

EDUCATION

2022 - Present

UNIVERSITY OF CAPE TOWN

- BSc Eng in Mechatronics
- CGPA: above 80%

2020 - 2021

NATIONAL UNIVERSITY OF
LESOTHO

- General Bachelor of Science
- GPA: 4.7 / 5.0

SKILLS

- Coding proficiency in Python, C/C++, Java, and MATLAB.
- Proficiency in Machine Learning
- Proficiency in Electronic Design
- Time Management
- Leadership
- Effective Communication
- Critical Thinking

PROFILE

I am an aspiring mechatronics engineer passionate about developing sustainable solutions affecting the African societies and the globe. My interests lie in embedded software and hardware design for control systems of small-scale and large-scale processes. I am keen to explore the use of Artificial Intelligence in driving the development of smarter and more sustainable solutions for engineering problems, particularly control systems.

WORK EXPERIENCE

- Fire Detection, UCT** AUG 2025 - PRESENT
Team Lead
 - Design and implement a fire detection system utilizing thermal cameras
 - Lead and manage a team of students working on the project
- Artificial Intelligence for Power, UCT** JUN 2025 - JULY 2025
Internship
 - Design and implement a low-cost PMU for measuring electrical parameters for potential use in Artificial Intelligence
 - Collaborate with a team of interns to accomplish the task

PROJECTS

- University of Cape Town** 2025
Detection of Predators in Penguin Colonies
 - Design and implement a system that detects and identifies predators in penguin colonies
- University of Cape Town** 2024
Path Optimization for Miniature robot
 - Developed software for a miniature vehicle robot to navigate a maze.

REFERENCES

Dr Sampath Jayalath

Senior Lecturer, UCT

Phone: 0216505865

Email: sampath.jayalath@uct.ac.za