Thatohatsi Motlhamme

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OVERVIEW

Motivated and detail-oriented individual with practical experience in electrical and mechanical engineering. Skilled in programming, circuit design, control systems, machine learning, and technical problem-solving.

EDUCATION

UNIVERSITY OF CAPE TOWN

2021-2024

Programme: BSc Eng. in Mechatronics | Specialisation: Mechatronics

- First-Class Honours
- Dean's List Academic Achievement Award (2021-2024)
- Received the Kopano (2021) and Woolsack Residence (2023) Top Achiever Awards for outstanding academic performance within the Engineering and Built Environment Faculty.
- Peralex Electronics Prize for achieving the top position in EEE3096S Embedded Systems II in 2023

ROOSEVELT HIGH SCHOOL

2016-2020

- Academic Top Ten (2016-2020)
- Academic Full Colours (2019, 2020)
- Second highest academic average at graduation
- Actively contributed as a member of the RHS school committee in 2019
- Engaged in leadership as part of the Representative Council of Learners in 2020

PROFESSIONAL EXPERIENCE

MIZANA ENGINEERING AND SERVICES (PTY) LTD

June 2022 – August 2022

Vacation Work

Tasks and Skills Developed:

- Conducted diagnostics and repairs on induction motors, including detailed component replacement and performance verification
- Assembled and tested water pumps, and introduced a new in-house testing method for operational integrity
- Developed advanced troubleshooting and problem-solving techniques

UNIVERSITY OF CAPE TOWN

June 2023 - July 2023

Electrical Engineer Intern | Vacation Work

Tasks and Skills Developed:

- Analysed and modified a star-delta starter panel to reduce starting current of induction motors
- Enhanced efficiency and corrected errors in control panel schematics using EPLAN software
- Improved problem-solving and troubleshooting skills in electrical systems

TECHNICAL SKILLS AND COMPETENCIES

Programming: Python, C, Java, HTML, CSS, JavaScript

Design and Drafting:

- Circuit design and analysis using KiCAD, Altium Designer, LTSpice, EPLAN, EasyEDA
- 3D mechanical design using SolidWorks, Blender