

STUDIES OF STABILITY IN ROLLING SPHERE ROBOT

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STATEMENT OF AWARD FOR DEGREE

1. **Bachelor of Engineering Technology**

Thesis submitted in fulfilment of the requirements for the award of the degree of Bachelor of Engineering Technology in Electrical.

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I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

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LIST OF SYMBOLS

kHz	kilohertz
V	Voltage
C	Coulomb
m/s	Meter per second
m	meter
mA	milliampere
A	ampere
mAh	milliampere per hour
dBm	Deciblemilliwatt
RPM	Revolutions per Minute
MHz	Megahertz
Ghz	Gigahertz

LIST OF ABBREVIATIONS

IDU	Inside Drive Unit
IDE	Integrated Development Environment
API	Programming Interface
EDR	Enhanced Data Rate
DC	Direct Current
Li Po	Lithium Polymer
PWM	Pulse with Modulation
MEMS	Micro Electrical and Mechanical
ICSP	In Serial Circuit Programming
TTL	Transistor Transistor Logic
TX	Transmit
RX	Receive
C	Discharge rate
S	Cell of battery
AC	Alternating Current
USB	Universal Serial Bus
COM	Communication
LPT	Line Print Terminal
UART	Universal Asynchronous Receiver Transmitter
CMOS	Complementary Metal Oxide Semiconductor
ADC	Analog to Digital Converter