VISVESWARAYA TECHNOLOGICAL UNIVERSITY

BELGAUM- 590 010

Project report

On

"SELF BALANCING SCOOTER"

(Approved by KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY, IISc, BANGALORE for financial aid)

A dissertation submitted to the Visvesvaraya Technological University
During the academic year 2009-10 in partial fulfilment for the award of

Bachelor's degree
In

INDUSTRIAL AND PRODUCTION ENGINEERING

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Project guide

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2009-10

ABSTRACT

Self-balancing scooters are often thought to be technological miracles, but it is not actually very hard to build one and involves the principles of basic physics.

It also doesn't need complex or high-performance software. It also doesn't need complex or high-performance software. Gravity helps a lot. So does high school physics. To balance, all you really need is for the center of gravity to be below the center of the wheels. The lower the better. Reason is that the center of gravity is below the pivot. pivot. Leaning forward or backwards will exert vertical force, which would have toppled you down, but humans have a natural self-correcting gravity defeating devices called feet. Your natural instincts will keep you standing upright. Make sure you start the motors slowly and slow down gradually and you will maintain balance

The main objective of this project is to develop a self balancing scooter capable of transporting a single passenger and to study the most possible balancing scooter which is using less complicated system that believed can reduce the complexity of the system.

The uniqueness of the two wheeled balancing platform has became the reason for many researcher to continue investigate this unstable nature of the system. The idea of a two wheeled balancing scooter has come in the control research world for a few years. Due to its new technology, available balancing scooter in the market is still very expensive. Looking at the benefit of this balancing platform as a human transporter, then a research to develop more reasonable price of this system is going to be conducted.

In this project we could only afford to build a prototype of the Balancing Scooter which could carry a weight of 1-1.5 Kg.