VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belagavi – 590 010

PROJECT REPORT

ON

"ADVANCED VIRTUAL FENCING AND CONTROL SYSTEM FOR ANIMALS"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

Name	USN
SNEHA K.	4AL12EC083
SUPRIYA.	4AL12EC085
T. R. ASHWINI	4AL12EC087
VIDYAKUMARI M.	4AL12EC088

Under the Guidance of
Mr. SANTHOSH T.
Assistant Professor
Department of E&C Engineering

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225.

2015-2016

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225

(Affiliated to VTU, BELAGAVI)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "**ADVANCED VIRTUAL FENCING AND CONTROL SYSTEM FOR ANIMALS**" *is a bonafide work carried out by*

SNEHA K.	**4AL12EC083**
SUPRIYA	**4AL12EC085**
T. R. ASHWINI	**4AL12EC087**
VIDYA KUMARI M.	**4AL12EC088**

in partial fulfillment for the award of BACHELOR OF ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2015–2016. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

Signature of the Guide **Mr. Santhosh T.**	**Signature of the H.O.D** **Prof. Raghavendra Rao A.** H.O.D. Dept. Of Electronics & Communication Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225	**Signature of the Principal** **Dr. Peter Fernandes.** PRINCIPAL Alva's Institute of Engg. & Technology Mijar, MOODBIDRI - 574 225

EXTERNAL VIVA

Name of the Examiners — Signature with date

1..... .....

2..... .....

ABSTRACT

Animal husbandry has become an important source of income for millions of rural families and has taken an important role in providing employment and income generating opportunity. Indian dairying shows few of the best statistics. Today, India has the world's largest dairy herd. Managing this immense number of animals is not an easy task. Often herds of cattle cross boundaries, lose direction and encroach into restricted areas. Also overgrazing is causing a serious problem of soil erosion. Construction of a real physical fence is too expensive and due to large and variable areas of grass lands, it is difficult too. In order to overcome these shortcomings of traditional ways, the proposed system designs a virtual fence in order to control and manage animals. Virtual fencing is a method of controlling animals without ground-based fencing. Control occurs by altering an animal's behavior through one or more sensory cues administered to the animal after it has attempted to cross boundary of IR sensor. This boundary can be of any geometrical shape, is detected by a computer system worn by the animal. This is done using spray control system and electrically triggerable gunshot.