VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010

PROJECT REPORT ON

"SPECIAL PURPOSE MACHINE TO IMPROVE EYE-HAND COORDINATION FOR SPECIAL CHILDREN"

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

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

Submitted By

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(Affiliated to VTU, **BELAGAVI**)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "**SPECIAL PURPOSE MACHINE TO IMPROVE EYE HAND COORDINATION FOR SPECIAL CHILDREN**" *is a bona fide work carried out by*

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in partial fulfillment for the award of BACHELOR OF ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2018–2019. 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	**Signature of the H.O.D**	**Signature of the Principal**
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ABSTRACT

Irrespective of physical and mental situation every child must get an opportunity to learn alongside playing. Unfortunately this does not holds well in case of children with special need. The actual challenge comes into picture during the initial phase of learning. In most of the cases the incorporated traditional methods fails to get the attention of the child throughout the therapy session and they are quite human resource intensive. Teaching the special children within stipulated time with more efficiency and interactive manner with precise and modeled results is quite a challenge in itself.

Analyzing all the above problems the device has been developed which can train and enhance gross motor skills, eye-hand coordination and is an attention seeking device. The device houses a powerful microcontroller unit which handles complex algorithms and tasks with highest efficiency and precision. This design has visual, audio as well as a tactile (vibration) feedback associated with individual tasks to make every task interesting and interactive for the children. The designed device is light-weight, highly durable and a well-built with all the safety protections along with the precautions.