Dr. Ambedkar Institute of Technology

Department of Medical Electronics Engineering

Project Details
Batch: 2018-2022

SL.NO	USN	NAME OF THE STUDENT	PROJECT TITLE	PLACE OF CONDUCTION
1	1DA18ML001	AMOGHAVARSHA N	COGNITIVE EFFECTS OF YOGA ON DIABETIC EFFECTED BASED ON ERP ANALYSIS	S-VYASA YOGA UNIVERSITY JIGANI,BANGALORE.
2	1DA18ML003	ARPITHA S		
3	1DA18ML013	POOJA M		
4	1DA18ML015	RAKSHITHA M		
1	1DA17ML002	BHARATH M	DESIGNING A PORTABLE VENTILATOR	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY
2	1DA17ML011	MAHESH L		
3	1DA18ML006	HARSHA MOHAN		
4	1DA19ML400	VINAY KUMAR K DESHPANDE		
1	1DA18ML002	ANVITH ANAND P	PREDICTION OF DIABETIC RETINOPATHY USING NEURAL NETWORKS	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY
2	1DA18ML007	HITHAISHRI RAJ D		
3	1DA18ML008	KARTHIK A		
4	1DA18ML019	SANJANA B A		
1	1DA18ML004	DIGAMBAR DHANAGAR	DEVELOPMENT OF AN ASSESSMENT TOOL BASED ON NEUROMECHANIC MEASUREMENTS USING OPENPOSE ALGORITHM	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY
2	1DA18ML017	SAHANA L		
3	1DA18ML023	TANIYA P		
4	1DA18ML024	VARDHINI V M		

Head of the Department
Dept. of Medical Electronics Engineering
Dr. Ambedkar Institute of Technology
Bangalore - 560 056

1	1DA18ML005	DIVYA R	CARDIAC ARRHYTHMIA DETECTION USING MACHINE LEARNING	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY
2	1DA18ML016	RISHIKA R		
3	1DA18ML018	SANGEETHA R		
4	1DA18ML021	SPANDANA K R		
1	1DA18ML009	LEKHA V	ANALYSIS OF SLEEP EEG USING ANN TECHNIQUE	DR. AMBEDKAR INSTITUTE OF TECHNOLOGY
2	1DA18ML011	MEENA E		
3	1DA18ML022	SREE HARSHA RAMAANATH A V L		
4	1DA18ML025	VISHMA V		
1	1DA18ML010	MANASA R	MEDITATION BENEFITS BASED ON EEG SPECTRAL ANALYSIS	S-VYASA YOGA UNIVERSITY JIGANI,BANGALORE
2	1DA18ML012	NIHARIKA HARISH		
3	1DA18ML014	PRIYANKA H		
4	1DA18ML020	SHEETAL S		

A.B.

HOD

Head of the Department
Dept. of Medical Electronics Engineering
Dr. Ambedkar Institute of Technology
Bangalore - 560 056

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous institution affiliated to VTU, Belgaum and Aided by Government of Karnataka, INDIA)
Near Jnana Bharathi Campus, Outer Ring Road, Mallathally, Bengaluru-560056.

Aided By Govt. of Karnataka

PROJECT REPORT

on

"DESIGNING A PORTABLE VENTILATOR"

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

BACHELOR OF ENGINEERING

in

MEDICAL ELECTRONICS

by

BHARATH M	1DA17ML002
MAHESH L	1DA17ML011
HARSHA MOHAN	1DA18ML006
VINAY KUMAR K DESHPANDE	1DA19ML400

Under the Guidance
of
Dr. D K RAVISH
Associate Professor
Department of Medical Electronics
Dr. AIT, Bengaluru - 560056

DEPARTMENT OF MEDICAL ELECTRONICS
Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY
MALLATHAHALLI, OUTER RING ROAD, BENGALURU – 560056

2021-22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY
Mallathahalli, Bengaluru - 560056

Department of MEDICAL ELECTRONICS

Certificate

Certified that the project work entitled **"DESIGNING A PORTABLE VENTILATOR"**, carried out by **BHARATH M (1DA17ML002), MAHESH L (1DA17ML011), HARSHA MOHAN (1DA18ML006), VINAY KUMAR K DESHPANDE (1DA19ML400),** Bonafede students of Dr. Ambedkar Institute of Technology, Bengaluru – 560056 in partial fulfillment for the award of Bachelor of Engineering in MEDICAL ELECTRONICS of the Visvesvaraya Technological University, Belagavi during the year 2021–2022. It is certified that all the 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.

Signature of the Guide	Signature of the HOD	Signature of the Principal
(Dr. D K RAVISH)	(Dr. SHANTHI K J)	(Dr. MEENAKSHI.M)

Name of the Examiners	Signature with Date
1. Dr A.Ponnanjeevalla	20/7/22
2. Dr. Narayanappa, CK	20/7/22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An autonomous institution, Aided by Govt. of Karnataka, Affiliated to VTU)BDA
Outer Ring Road, Near Jnana Bharathi Campus, Bengaluru - 560056

PROJECT REPORT
ON

"PREDICTION OF DIABETIC RETINOPATHY USING NEURAL NETWORKS"

Submitted By

ANVITH ANAND P	**1DA18ML002**
HITHAISHRI RAJ D	**1DA18ML007**
KARTHIK A	**1DA18ML008**
SANJANA B A	**1DA18ML019**

BACHELOR OF ENGINEERING
IN
DEPARTMENT MEDICAL ELECTRONICS

Under The Guidance Of

Dr A P MANJUNATHA
Associate Professor,
Department of Medical Electronics

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY
Department of Medical Electronics

2021-2022

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An autonomous institution, Aided by Govt. of Karnataka, Affiliated to VTU)BDA Outer Ring Road, Near Jnana Bharathi Campus, Bengaluru - 560056

Aided By Govt. of Karnataka

Department of Medical Electronics

CERTIFICATE

Certified that the Major project work - Phase II (Eighth Semester) entitled **Prediction Of Diabetic Retinopathy Using Neural Networks** is carried out by the following bonafide students of Medical Electronics in partial fulfillment for the award of Bachelor of Engineering, B. E (Medical Electronics) at **Dr. Ambedkar Institute of Technology, Bangalore,** during the academic year2021-22.

Sl. No	USN(ascending order)	Name of Student
1	1DA18ML002	ANVITH ANAND P
2	1DA18ML007	HITHAISHRI RAJ D
3	1DA18ML008	KARTHIK A
4	1DA18ML019	SANJANA B A

It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the project report.

The project report has been approved satisfying the academic requirements prescribed for the said Degree.

A.P.	for A.P.
Guide	**HOD**

External Viva:

Sl. No	Name of the examiner	Signature with date
1	Dr A.P. Manjunatha	A.P. 20/7/22
2	Dr. Narayanappa. CR	CR 20/7/22

Principal

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution, Aided by Govt. of Karnataka, Affiliated to VTU)

Aided By Govt. of Karnataka

Project Report on

DEVELOPMENT OF AN ASSESSMENT TOOL BASED ON NEUROMECHANIC MEASUREMENTS USING OPENPOSE ALGORITHM

Submitted by:

Digambar Dhanagar	**1DA18ML004**
Sahana L	**1DA18ML017**
Taniya P	**1DA18ML023**
Vardhini V M	**1DA18ML024**

BACHELOR OF ENGINEERING
IN
DEPARTMENT OF MEDICAL ELECTRONICS

Under the guidance
of.

Dr. D.K. Ravish
Associate Professor
Medical Electronics
Dr. Ambedkar Institute
of Technology

Department of Medical Electronics
2021-2022

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution, Aided by Govt. of Karnataka, Affiliated to VTU)

Aided By Govt. of Karnataka

CERTIFICATE

This is to certify that the project work titled **"DEVELOPMENT OF AN ASSESSMENT TOOL BASED ON NEUROMECHANIC MEASUREMENTS USING OPENPOSE ALGORITHM"** carried out by **DIGAMBAR DHANAGAR, SAHANA L, TANIYA P AND VARDHINI.V.M** with USN **1DA18ML004, 1DA18ML017, 1DA18ML023 and 1DA18ML024,** bonified students of Dr. Ambedkar Institute of Technology, Bangalore-56, under my guidance during the academic year **2021-2022** and is in partial fulfillment for the award of **Bachelor of engineering** in the Department of **Medical Electronics** of the **Dr. Ambedkar Institute of Technology, Bangalore-56.** It is certified that all the corrections/suggestions indicated during internal assessment have been incorporated in the report deposited in the department.

The project report has been approved as it satisfies the academic requirements in respect to project work prescribed for the said degree.

Dr. D K Ravish	Dr. M Meenakshi	Dr. Shanthi K J
Associate Professor	Principal	Head of the Department
Dept. of ML, Dr. AIT	Dr.AIT	Dept. of ML, Dr. AIT

External Viva

Name of the examiner, Signature with date

1. Dr Manjunatha A.P. A.P. 20/7/22
2. Dr. Nagaraja Reddy, CK 20/7/22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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Near Jnana Bharathi Campus, Outer Ring Road, Mallathally, Bengaluru-560056.

DEPARTMENT OF MEDICAL ELECTRONICS

MAJOR PROJECT (18MLP81)
REPORT ON

"CARDIAC ARRHYTHMIA DETECTION USING MACHINE LEARNING"

SUBMITTED BY

DIVYA R	**1DA18ML005**
RISHIKA R	**1DA18ML016**
SANGEETHA R	**1DA18ML018**
SPANDANA K R	**1DA18ML021**

UNDER THE GUIDANCE
OF
Dr.NAYANA R SHENOY
(INTERNAL)
ASSISTANT PROFESSOR OF MEDICAL ELECTRONICS

DEPARTMENT OF MEDICAL ELECTRONICS

2021-2022

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous institution affiliated to VTU, Belgaum and Aided by Government of Karnataka, INDIA)
Near Jnana Bharathi Campus, Outer Ring Road, Mallathally, Bengaluru-560056.

CERTIFICATE

This is to certify that the project work titled **"CARDIAC ARRHYTHMIA DETECTION USING MACHINE LEARNING"** is carried out **DIVYA R (1DA18ML005), RISHIKA R (1DA18ML016), SANGEETHA R (1DA18ML018), SPANDANA K R (1DA18ML021),** bonafide students of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, BENGALURU-56,** during the academic year 2021-2022 and is in partial fulfilment for the award of the degree in **BACHELOR OF ENGINEERING** in **MEDICAL ELECTRONICS** of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, Bangalore-56.** It is certified that all correction/suggestion indicated during internal assessment have been incorporated in the report deposited in the department. It is further certified that their work has not been submitted to any university/organization for award or any other degree or diploma or certificate including a similar degree. The project report has been approved to it satisfies the academic requirements in the respect of project work prescribed for the Bachelor of Engineering Degree.

Signature of the Internal Guide	Signature of the Principal	Signature of the HOD
Dr.Nayana R Shenoy	Dr. M Meenakshi	Dr. Shanthi K J

1. Dr. Narayanappa. CK 20/7/22

2. Dr A.P. Manjunatha A.P. A.P. 20/7/22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

An Autonomous Institution Affiliated to VTU, Belgaum, and Aided by the Government of Karnataka India Bangalore-560056

Aided By Govt. of Karnataka

PROJECT PHASE -02

"Analysis of Sleep EEG Using ANN Technique"

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

BACHELOR OF ENGINEERING
in
MEDICAL ELECTRONICS
By

Lekha V	**1DA18ML009**
Meena E	**1DA18ML011**
Sree Harsha Ramaanath AVL	**1DA18ML022**
Vishma V	**1DA18ML025**

Under the Guidance of
Dr.A P MANJUNATHA
Associate Professor, Department of ML,Dr.AIT,Bengaluru-560056

Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY
Mallathahalli, Bengaluru-560056

DEPARTMENT OF MEDICAL ELECTRONICS

Aided By Govt. of Karnataka

CERTIFICATE

Certified that the project work entitled **"Analysis Of Sleep EEG Using ANN Technique"**, carried out by **LEKHA V (1DA18ML009), MEENA E (1DA18ML011), SREE HARSHA RAMAANATH AVL (1DA18ML022),VISHMA V (1DA18ML025)** bonafide students of Dr. Ambedkar Institute of Technology, Bengaluru – 560056 in partial fulfillment for the award of Bachelor of Engineering in MEDICAL ELECTRONICS of the Visvesvaraya Technological University, Belagavi during the year 2021–2022. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the Report deposited in the department library. The project report has been approved as it satisfies the academic requirements.

Signatureof theguide	Signatureof theHOD	Signatureof thePrincipal
(Dr. A P MANJUNATHA)	(Dr.SHANTHI KJ)	(Dr.MEENAKSHI.M.)

ExternalViva

Name of the Examiners	Signature with Date
1. Dr. Manjunatha A.P.	20/7/22
2. Dr. Narayanappa, CK	20/7/22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous institution affiliated to VTU, Belgaum and Aided by Government of Karnataka, INDIA)
Near Jnana Bharathi Campus, Outer Ring Road, Mallathally, Bengaluru-560056.

PROJECT REPORT ON

"MEDITATION BENEFITS BASED ON EEG SPECTRAL ANALYSIS"

Submitted by

MANASA R	**1DA18ML010**
NIHARIKA HARISH	**1DA18ML012**
PRIYANKA H	**1DA18ML014**
SHEETAL S	**1DA18ML020**

BACHELOR OF ENGINEERING

In

DEPARTMENT OF MEDICAL ELECTRONICS

Under the guidance of

Dr. SHANTHI K J (INTERNAL)
HOD of ML
KAMALA C (INTERNAL)
Assistant professor of
Ml
Dr. Ambedkar institute of technology

Dr. DEEPESHWAR SINGH
(EXTERNAL)
ASSOCIATE PROFESSOR
S-VYASA YOGA UNIVERSITY,
BANGALORE, INDIA

DEPARTMENT OF MEDICAL ELECTRONICS

Dr. Ambedkar Institute Of Technology, Bangalore

2021-2022

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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Near Jnana Bharathi Campus, Outer Ring Road, Mallathally, Bengaluru-560056.

CERTIFICATE

This is to certify that the project work titled **"MEDITATION BENEFITS BASED ON EEG SPECTRAL ANALYSIS"** is carried out by **MANASA R (1DA18ML010), NIHARIKA HARISH (1DA18ML012), PRIYANKA H (1DA18ML014), SHEETAL S (1DA18ML020)** bonafide students of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, BENGALURU-56,** during the academic year 2021-2022 and is in partial fulfilment for the award of the degree in **BACHELOR OF ENGINEERING** in **MEDICAL ELECTRONICS** of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, Bangalore-56.** It is certified that all correction/suggestion indicated during internal assessment have been incorporated in the report deposited in the department. It is further certified that their work has not been submitted to any university/organization for award or any other degree or diploma or certificate including a similar degree. The project report has been approved to it satisfies the academic requirements in the respect of project work prescribed for the Bachelor of Engineering Degree.

Signature of the Principal
Dr. M Meenakshi

Signature of the Internal Guide	**Signature of the External Guide**	**Signature of the HOD**
Dr. Shanthi K J	**Dr. DEEPESHWAR SINGH**	**Dr. Shanthi K J**
Kamala C		
Sign of Internal Examiner:	20/7/22	
Sign of External Examiner:	20/7/22	
Date: 20/07/2022		

LETTER OF COMPLETION

This is to certify that **MANASA R (1DA18ML010), NIHARIKA HARISH (1DA18ML012), PRIYANKA H (1DA18ML014), SHEETAL S (1DA18ML020),** students of B.E (Medical Electronics) at **Dr. Ambedkar Institute of Technology, Bangalore**, has done their project work on **MEDITATION BENEFITS BASED ON EEG SPECTRAL ANALYSIS** at **S-VYASA YOGA UNIVERSITY, BANGALORE, INDIA**. During the project work period, students carried out their duties and responsibilities satisfactorily. Students have demonstrated their ability to understand the requirements of a product and also tackle any issues with smart design decisions. They were punctual and maintained professionality throughout the project work.

I wish them all the best for their future endeavors in choosing a career of their choice to excel in.

[Signature]

[Name and Designation]

Dr. DEEPESHWAR SINGH, Ph.D.
Principal Investigator & Young Scientist
Swami Vivekananda Yoga Anusandhana Samsthana
#19, Eknath Bhavan, Gavipuram Exrtn.
KG Nagar, Bangalore: 560-019-India
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Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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BDA Outer Ring Road, Near Jnana Bharathi Campus, Mallathalli, Bengaluru-560056.

PROJECT REPORT ON

COGNITIVE EFFECTS OF YOGA ON DIABETIC EFFECTED BASED ON ERP ANALYSIS

SUBMITTED BY

AMOGHAVARSHA N	1DA18ML001
ARPITHA S	1DA18ML003
POOJA M	1DA18ML013
RAKSHITHA M	1DA18ML015

BACHELOR OF ENGINEERING

IN

DEPARTMENT OF MEDICAL ELECTRONICS

UNDER THE GUIDANCE OF

Dr. SHANTHI K J (INTERNAL)
HOD of ML Department
Dr. NAYANA R SHENOY (INTERNAL)
ASSISTANT PROFESSOR
Department of Medical Electronics
Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

Dr. DEEPESHWAR SINGH(EXTERNAL)
ASSOCIATE PROFESSOR
S-VYASAYOGA UNIVERSITY,
BANGALORE, INDIA

DEPARTMENT OF MEDICAL ELECTRONICS

2021-2022

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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BDA Outer Ring Road, Near Jnana Bharathi Campus, Mallathalli, Bengaluru-560056.

Aided By Govt. of Karnataka

CERTIFICATE

This is to certify that the project work titled **"COGNITIVE EFFECTS OF YOGA ON DIABETIC EFFECTED BASED ON ERP ANALYSIS"** is carried out by Mr./Ms. **AMOGHAVARSHA N, ARPITHA S, POOJA M** and **RAKSHITHA M** with USN **1DA18ML001, 1DA18ML003, 1DA18ML013 and 1DA18ML015** respectively, bonafide students of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, BENGALURU-56,** during the academic year 2021-2022 and is in partial fulfilment for the award of the degree in **BACHELOR OF ENGINEERING** in **MEDICAL ELECTRONICS** of **Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY, Bangalore-56.** It is certified that all correction/suggestion indicated during internal assessment have been incorporated in the report deposited in the department. It is further certified that their work has not been submitted to any university/organization for award or any other degree or diploma or certificate including a similar degree. The project report has been approved to it satisfies the academic requirements in the respect of project work prescribed for the Bachelor of Engineering Degree.

Signature of the Principle

Dr. M MEENAKSHI

Signature of the HOD and Internal Guide	Signature of the Internal Guide	Signature of the External Guide
Dr. SHANTHI K J	Dr. NAYANA R SHENOY	Dr. DEEPESHWAR SINGH

External Viva

Name of the examiners Signature with Date

1. Dr. Narayanappa. C 20/7/22
2. Dr Manjunatha A-P. A-P. 20/7/22

LETTER OF COMPLETION

This is to certify that Mr./Ms. **AMOGHAVARSHA N, ARPITHA S, POOJA M** and **RAKSHITHA M** with USN **1DA18ML001, 1DA18ML003, 1DA18ML013 and 1DA18ML015** respectively, students of B.E (Medical Electronics) at **Dr. Ambedkar Institute of Technology, Bangalore**, has done their project work on **COGNITIVE EFFECTS OF YOGA ON DIABETIC EFFECTED BASED ON ERP ANALYSIS** at **S-VYASA YOGA UNIVERSITY, BANGALORE, INDIA**. During the project work period, students carried out their duties and responsibilities satisfactorily. Students have demonstrated their ability to understand the requirements of a product and also tackle any issues with smart design decisions. They were punctual and maintained professionality throughout the project work.

I wish them all the best for their future endeavors in choosing a career of their choice to excel in.

Dr. DEEPESHWAR SINGH, Ph.D.
Principal Investigator & Young Scientist
Swami Vivekananda Yoga Anusandhana Samsthana
#19, Eknath Bhavan, Gavipuram Extn.
KG Nagar, Bangalore: 560-019-India
Mail: deepeshwar.singh @gmail.com

Dr. DEEPESHWAR SINGH

ASSOCIATE PROFESSOR

S-VYASAYOGA UNIVERSITY, BANGALORE, INDIA