



Vivekanand Education Society's Institute of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)

Criteria 1.3 : Curriculum Enrichment

**1.3.3 Percentage of students undertaking project work/ field work/
internships (Data for the latest completed academic year) -2020-21
Department of Instrumentation -M.E**



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1- List of Student Field Projects 2020-21



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M.E INSTRUMENTATION Field Projects 2020-21		
Name of the Student	Mentor Name	Title of the Project
Desurkar Akshay Rajendra	Dr. Mrs. Jayalekshmi Nair	Random Matrix Theory Application for Denoising Gene Co-expression Data
Vartak Avanti Sanjay	Mrs. Sangeetha Prasanna Ram	Diabetic Retinopathy Detection using Machine Learning
Aher Prathamesh Subrao	Mrs. Nilima Warke	IoT Based Forehead Pulse Oximeter



(Mrs. Nilima Warke)



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2. Sample List of Student Special Topic Seminars 2020-21



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M.E Instrumentation Special Topic Seminar Details			
Sr. No	Name of the student	Guide	Title of Special topic seminar
1	Aher Prathamesh Subrao	Mrs. Nilima Warke	Modern Techniques of Sensing and Monitoring Vital Health Parameters
2	Desurkar Akshay Rajendra	Dr. Mrs. Jayalekshmi Nair	A Random Matrix Theory Approach to Denoise Single Cell Data
3	Vartak Avanti Sanjay	Mrs. Sangeetha Prasanna Ram	Various Image Processing Techniques applied on Eye Images for the diagnosis of different diseased eye conditions



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Sample Special Topic Completion Certificates



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A Special Topic Seminar

Report on

Modern Techniques of Sensing and Monitoring Vital Health Parameters

Submitted in partial fulfillment of the

Requirement for the degree of

Master of Engineering

in

Instrumentation and Control

By

Mr. Aher Prathamesh

Under the guidance of

Mrs. Nilima Warke

Associate Professor, Instrumentation Department



Department of Instrumentation Engineering
Vivekanand Education Society's Institute Technology
Chembur, Mumbai 400074



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CERTIFICATE

This is to certify that the Special topic seminar report entitled "**Modern Techniques of Sensing and Monitoring Vital Health Parameters**" is a bonafide work of "**Mr. Aher Prathamesh**" submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of "**Master of Engineering**" in "**Instrumentation and control**".

Guide

Mrs. Nilima Warke

Dr. (Mrs.) J.M. Nair

Principal

VES Institute of Technology
PRINCIPAL,
VIVEKANAND EDUCATION SOCIETY'S
INSTITUTE OF TECHNOLOGY
HASHU ADHANI MEMORIAL COMPLEX,
COLLECTOR'S COLONY, CHEMBUR,
MUMBAI-400 074, INDIA.



Dr. P.P Vaidya

Head of Department

Instrumentation Engineering



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Special Topic Seminar Approval Sheet for M. E.

This Special topic seminar report entitled 'Modern Techniques of Sensing and Monitoring Vital Health Parameters' by Mr. Aher Prathamesh is approved for the degree of Master of Engineering in Instrumentation and Control.

Examiner(s):

1. G. Krishnamoorti

2. S. J. Patil

3. P. P. Vaidya

4. M. S. Patil

5. S. J. Patil

Date: 10th Oct 2020.

Place: Chembur, Mumbai



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A Seminar Report On
**A RANDOM MATRIX THEORY APPROACH TO DENOISE
SINGLE CELL DATA**

Submitted in partial fulfilment of the
requirement for the degree of
Masters of Engineering

In
Instrumentation and Control

By
Mr. Akshay Desurkar
Under the guidance of
Dr. Mrs. Jayalakshmi Nair

Principal, VESIT



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CERTIFICATE

This is to certify that the seminar report entitled "A Random Matrix Theory Approach to Denoise Single Cell Data" is a bonafide work of "Mr. Akshay Desurkar" submitted to the University of Mumbai in partial fulfilment of the requirement for the award of the degree of "Master of Engineering" in "Instrumentation and control".

Guide

Dr. (Mrs.) J.M Nair

Head of Department

Dr. P.P Vaidya

Dr. (Mrs.) J.M. Nair

Principal

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SPECIAL TOPIC SEMINAR APPROVAL SHEET FOR M.E

This seminar report entitled "A Random Matrix Theory Approach to Denoise Single Cell Data" by Mr. Akshay Desurkar is approved for the degree of Masters of Engineering in Instrumentation and Control.

Examiner(s):

1. G. Krishnamach

2. S. S. S.

3. P. P. Vaidya

4. S. S.

5. S. S.

Date: 10th Oct 20.

Place: Chembur, Mumbai



Vivekanand Education Society's Institute of Technology

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A Seminar Report on
**Various image processing techniques applied on eye images for
the diagnosis of different diseased eye conditions**

Submitted in partial fulfillment of the
Requirement for the degree of

Master of Engineering

in

Instrumentation & Control

By

Miss. Avanti Vartak

Under the guidance of

Mrs. Sangeetha Prasanna Ram
Associate Professor



Department of Instrumentation Engineering
Vivekanand Education Society's Institute of Technology
Chembur, Mumbai



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CERTIFICATE

This is to certify that the seminar report entitled "Various image processing techniques applied on eye images for the diagnosis of different diseased eye conditions" is a bonafide work of "Miss. Avanti Vartak" submitted to the University of Mumbai in partial fulfillment of the requirement for the award of the degree of "Master of Engineering" in "Instrumentation and control".

Guide

Mrs. Sangeetha Prasanna Ram

Dr. (Mrs.) J.M. Nair

Principal

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Dr. P.P Vaidya

Head of Department

Instrumentation Engineering



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Special Topic Seminar Approval Sheet for M.E.

This seminar report entitled 'Various image processing techniques applied on eye images for the diagnosis of different diseased eye conditions' by Miss. Avanti Vartak is approved for the degree of *Master of Engineering in Instrumentation and Control*.

Examiner(s):

1. G. Krishnamoorti

2. Jayakumar

3. P. P. Keriya

4. Agarwal

5. Agarwal

Date: 10th Oct, 2020

Place: Chembur, Mumbai



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Sample Communications & Reports-Field Project



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Department of Instrumentation-ME Industry Project

Student Name: Avanti Vartak

Project Name: Diabetic Retinopathy Detection using Machine Learning

Industry: Aditya Jyot Foundation for Twinkling little eyes



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Sangeeta PrasannaRam <sangeeta.prasannaram@ves.ac.in>

Fwd: Fundus Images

Principal.vesit Ves <principal.vesit@ves.ac.in>
To: Sangeeta PrasannaRam <sangeeta.prasannaram@ves.ac.in>

Mon, Jul 27, 2020 at 7:08 AM

----- Forwarded message -----


From: Ashwini R <rogyeashwini@gmail.com>
Date: Sun 26 Jul, 2020, 10:41 PM
Subject: Fundus Images
To: Principal.vesit Ves <principal.vesit@ves.ac.in>
Cc: Radhika Krishnan <drradhika.ajftle@gmail.com>, Sundaram Natarajan <prof.drsn@gmail.com>

Dear Ma'am,

As discussed, sending you a set of Fundus images of 250 patients. Will send the 2nd set in a separate email.

Please let me know if there's any trouble in accessing them. Also attached are fundus grading details.
PFA.

 Fundus images

 1595782936282_Patient details.xlsx
20K



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Sangeeta PrasannaRam <sangeeta.prasannaram@ves.ac.in>

Fwd: BE project code

Sangeeta PrasannaRam <sangeeta.prasannaram@ves.ac.in>
To: Avanti Vartak <avantivartak97@gmail.com>

Tue, Oct 27, 2020 at 11:46 PM



Hi Avanti,

PFA below fundus images from Aditya Jyot for you to train and test.

Please do not share the images with anyone. It is confidential.

Thanks
Sangeetha Prasanna Ram
[Quoted text hidden]

2 attachments

-  Normal Vs DR3-DR4 - Transfer Learning-FCLayers.ipynb
306K
-  Test_Model_template.ipynb
19K



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