

This is to certify that the project report entitles

# "An Image Encryption and Decryption using AES algorithm"

Submitted by

Ghorband Mahima Imale Divya Kadam Shivani Chambrakulangara Athira

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Dr. R.V. Patil and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Dr. R. V. Patil

Guide & Head,

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 15 | 06 | 202 |



This is to certify that the project report entitles

# "Credit card Fraud Detection System"

Submitted by

Akhilesh Bhayye Gaurav Kumar Singh Sanika Dhamnaskar Sandeep Patil

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. S.V.Phulari and it is approved for the partial fulfillment of the requirement of Savitribal Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof. S. V. Phulari

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 15/06/202/



This is to certify that the project report entitles

# "A Face Emotion Recognition Method Using Convolutional Neural Network and Image Edge Computing"

Submitted by

Pranita Dalavi Nikita Bhosale Pooja Girme Payal Deshmukh Mohini Pansare

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. S. V. Phulari and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof. S. V. Phulari

Guide

**Department of Computer Engineering** 

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 15/06/202



This is to certify that the project report entitles

# "OCR Compiler"

Submitted by

Sachin Jain

**Pramod Dorle** 

Mohan More

Renuka Pawar

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of **Prof. A. A.** Bamanikar and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of **Bachelor of Engineering** (Computer Engineering).

Prof. A.A. Bamanikar

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune



This is to certify that the project report entitles

# "Curriculum Learning for Speech Emotion Recognition from Crowdsourced Labels"

Submitted by

Pooja Gawate Ashwini Gund Akshata Salunke Sumit Kakade

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. N.D. Sonawane and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof. N.D.Sonawane

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune



This is to certify that the project report entitles

# "Sdata Security of Dynamic and Robust Role Based Access Control from Multiple Authorities in Cloud Environment"

Submitted by

Yugandhara chaudhari Vishakha pundge Vaishnavi wayal Anshuja kumbhar

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of **Prof. N.D.Sonaw**ane and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of **Bachelor of Engineering** (Computer Engineering).

Prof. N.D.Sonawane

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune



This is to certify that the project report entitles

# "LMS Structured E/M learning platform"

Submitted by

Sidharth Gupta Sayalee Pawar Tushar Kale Prashant Gaikwad

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. A. A. Bamanikar and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof. A.A. Bamanikar

Guide

**Department of Computer Engineering** 

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune



This is to certify that the project report entitles

# "Modern E-store for fruits and Vegetables"

Submitted by

Madhuri Babasaheb Kadam Sachin Anil potre Priti Vishnu choudhari Pratiksha Sanjay Jadhav

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. A. A. Bamanikar and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof A A Bamanikar

Guide

**Department of Computer Engineering** 

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 15/06/2021



This is to certify that the project report entitles

# "Secure File Transfer on Cloud with Encryption"

Submitted by

Swapnil sawant Atharva Shrotre Abraar Khan Nitin kale

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of **Prof. S. M.** Bhadkumbhe and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of **Bachelor** of **Engineering** (Computer Engineering).

Prof. S. M. Bhadkumbhe

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 17/06/202/



This is to certify that the project report entitles

# "Milk Monitoring system using IOT"

Submitted by

Vaibhav N. Patil Sujyot Butale Pratik Nimbale Omkar Ware

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Prof. S. M. Bhadkumbhe and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Prof. S. M. Bhadkumbhe

Guide

Department of Computer Engineering

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune



This is to certify that the project report entitles

# "Automation in Agriculture and IOT"

Submitted by

Pratiksha Dilip Shinde Alshwarya G Kalbhor Manali Anil Rahinj Deepali Babasaheb Kakade

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Dr. M.C.Hingane and it is approved for the partial fulfillment of the requirement of Savitribal Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Dr. M.C. Hingane

Guide

**Department of Computer Engineering** 

Dr. R. V. Patil

Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 49 | 06 | 2024



This is to certify that the project report entitles

# "Smart shopping using smart trolley"

Submitted by

Neha Jadhav Geeta Joshi Pratiksha Mane Rachana Kandhare

is a Bonafide student of this institute and the work has been carried out by him/her under the supervision of Dr. M.C. Hingane and it is approved for the partial fulfillment of the requirement of Savitribai Phule Pune University, for the award of the degree of Bachelor of Engineering (Computer Engineering).

Dr. M.C. Hingane

Guide

Department of Computer Engineering

Dr. R. V. Patil Principal

PDEA's College of Engineering Manjari (Bk.), Pune

Place: Pune

Date: 15/06/202/





#### YEAR 2020-21

# PDEA'S COLLEGE OF ENGINEERING MANJARI (Bk.), PUNE CERTIFICATE

This is to certify that the project report entitled

## "IOT BASED APPLIANCES CONTROL USING NODEMCU"

Submitted by-

NAGESH KAMBLE 71309994B

KARAN SHAH 71536240C

GIRISH WASNIK 71052500B

KESHAV PADVI 71310036C

Is a bonafide work carried out by them under the supervision of Prof. R.M.SAHU and it is approved for the partial fulfillment of the requirement of SAVITRIBAI PHULE PUNE UNIVERSITY for the award of the B.E Engineering (Electronics Engineering) during the academic rear 2020-21.

Prof. R.M.SAHU

Prof.R.M.SAHU

(Project Guide)

Head of Pspartment
Electronics and Telecom Engg. Department
P D E A's College of Engg. Manjari (Bk.), Pune

Place: - Manjari(BK), Pune.

Date:-





# PDEA'S COLLEGE OF ENGINEERING MANJARI (Bk.), PUNE CERTIFICATE

This is certify that the Seminar report entitled

# "ACCIDENT DETECTION & REPORTING"

Has been successfully completed by

SEBASTIAN D'CRUZ (71815787H)
AKASH INGALE (71708965H)
AMRUTA NARUTE (71926616F)
AKANKSHA KEDARI (71815819K)

It is a bonafide work carried out under the supervision of Prof R.M.SAHU and it isapproved for the partial fulfillment of requirement of Savitribai Phule Pune University for the award of BE in Electronics Engineering for the academic year 2020-21

Prof R.M.SAHU

**Project Guide** 

Place: Manjari (BK), Pune

Date:

Prof R.M.SAHU

Head of
Head of Department
Electronics and Department
PDEA's College of Engg. Manjari (Bk.), Pune



P.D.E.A.'s College Of Engineering, Manjari (Bk.), Pune-412307

CERTIFICATE

This is to certify that,
"SMART CITY WITH ENVIRONMENTAL
MONITORING AND SECURITY IN EMERGENCY
CONDITIONS"
Submitted by

CONDITIONS' Submitted by Deepti Lohani Ruchita Mehere Shilpa Gautam Sheetal Zarkar

is a record of bonafide work carried out by them, under my guidance, in partial fulfilment of the requirement for the award of the Final Year Bachelor of Engineering (Information Technology) of Savitribai Phule Pune University.

Date:

Place:Pune

Prof.A.B.Gadewar

Prof N ain

D. D. W. Patil

Guide

-4

Examiner

H.O.D

Principal

69/



PDEA's College of Engineering, Manjari(BK), Pune

#### DEPARTMENT OF INFORMATION TECHNOLOGY

#### CERTIFICATE

This is to certify that the Project Entitled

# ESTIMATING PROFILE OF SUCCESSFUL IT & COMPUTER SCIENCE STUDENT USING DATA MINING APPROACH

#### Submitted by

Mr. Krishna Nichal
Exam No: B120268509
Mr. Akshay Patil
Exam No: B120268511
Mr. Tejas Nigade
Exam No: B120268510
Mr. Krishna Mane
Exam No: B120268507
Mrs. Tejaswini Walbe
Exam No: B120268516

is a bonafide work carried out by Students under the supervision of **Prof.N.R. Jain** and it is submitted towards the partial fulfillment of the requirement of Bachelor of Engineering (Information Technology).

Prof. N.R. Jain Project Guide Department of IT

> Dr.B.V.Patil Principal

Prof. N.R. Jain H.O.D Department of IT

ır

Project Coordinator

Estamal Evaminar



This is to certify that the Project Entitled

#### AUTOMATED ATTENDANCE SYSTEM USING HOG FEATURE

Submitted by

Sayali Choudhari Exam No: B120268501 Deepak Kumar Exam No: B120268502 Jayshree Kolate Exam No: B120268505 Akash Shejwal Exam No: B120268514

is a bonafide work carried out by them under the supervision of Prof. R.M.Kawale and it is approved for the partial fulfillment of the requirement of Savtribai Phule Pune university, Pune for the award of the degree of Bachelor of Engineering (Information Technology).

Prof. R.M.Kawale

Dept. of Information Technology

Prof. N. R.Jain

Dept. of Information Technology

Dr. R. V. Pati

P.D.E.A's College of Engineering

Signature of Internal Examiner

Cimeture of External Examine



#### PDEA's College of Engineering, Manjari(BK), Pune

#### DEPARTMENT OF INFORMATION TECHNOLOGY

#### CERTIFICATE

This is to certify that the Project Entitled

#### MINING TIME SERIES DATA WITH OPTIMIZED APRIORI ALGORITHM

#### Submitted by

Mr. Akshay Malapure Exam No: B120268506
Mrs. Rajashri Kalbhor Exam No: B120268504
Mrs. Anupama Patil Exam No: B120268512
Mrs. Aditi Pawar Exam No: B120268513

is a bonafide work carried out by Students under the supervision of **Prof.D.S.Hirolikar** and it is submitted towards the partial fulfillment of the requirement of Bachelor of Engineering (Information Technology).

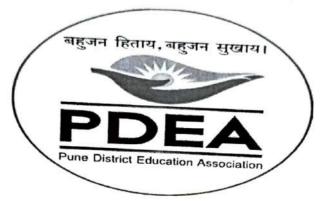
Prof. D.S.Hirolikar Project Guide Department of IT Prof. N.R. Jain H.O.D Department of IT

Prof Hirolikar
Project Coordinator

Principal

External Examiner

# **Pune District Education Association's** College of Engineering, Manjari (Bk), Pune.



# **CERTIFICATE**

This is to certify that

Mr. Siddheshwar Karande

B150260823

Mr.Nisar Inamdar

B150260812

Mr.Vivek Kumbhar

B150260826

Mr.Omkar Datrange

B150260807

have successfully completed the project stage-II entitled "EXPERIMENTAL INVESTIGATION CONTINUOUS LAYER INTERFACE PROJECTION" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune University. Date:

Place: Pune.

Prof. B. K. Suryatal

**External Examinar** 

Head of Department

Dr. S. A. Patil/

Head of Department Department of Meritar and indering PDEA's College of Engineering

Manjar (8k), Pune-412307

Principal

Dr. R.V. Patil

Cane District Education Association's

Francoung Manjari (Bk.). 117-30

# Pune District Education Association's College of Engineering, Manjari (Bk), Pune.



## CERTIFICATE

This is to certify that

Mr. Phuke Sumit

B150260842

Mr. Patil Samadhan

B150260839

Mr. Kudale Rushikesh

B150260824

Mr. Kutarmare Mohit

B150260827

Have successfully completed the project stage-Entitled "Use of Agricultural Dryer in the field of recent Agriculture" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune . University, Pune.

Date:

Place:

Guide

Prof. A.V. Dumbre

External Examiner

Head of Department

Prof.S.A.Patil

Head of Department Department of Merit in 165: Engineering PDEA's Co-age of Engineering Manjari (8k), Pune-412307

Principal Dr. R.V. Patil

Turn District Edge tion 2\esociation's in in an Ingan (Bk.)

# Pune District Education Association's College of Engineering, Manjari (Bk), Pune.



# CERTIFICATE

#### This is to certify that

Sul Nikhil Chandrakant B150260860

Zimal Swapnil Anand B150260872

Paliwal Saurabh Sachindra B150260837

have successfully completed the project stage-Hentitled "Industrial Application of Dual Refrigerator Dual Refrigerator" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune University.

Date:

Place:

Prof. A. V. Dumbre

Head of Department

Prof. S. A. Patil

Head of Department
Department of Ment Continening
PDEA's Co

Manjar (Bk) Polic 412307

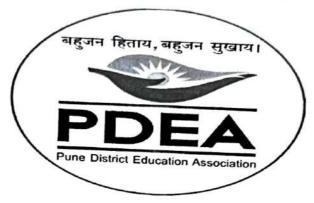
External Examiner

Principal

Dr. R.V. Patil

Pune District Education Association's

# Pune District Education Association's College of Engineering, Manjari (Bk), Pune.



## **CERTIFICATE**

This is to certify that

Mr. Rushikesh Thakare B150260865 Mr. Durgesh Pawar B150260841

Mr. Parag Chavan B150260841

B150260841

Mr. Saurabh Sonawane B150260858

have successfully completed the project stage-II entitled "SMART HEALTH CARE MACHINE" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune University.

Date:

Place: Pune

Guide

Prof. N. A. Kumbhar

External Examinar

Head of Department

Dr. S. A. Patil

Head of Department

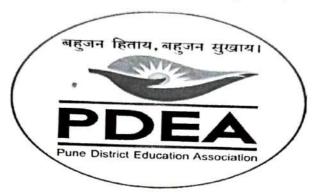
Opportment of Meon and Engineering POEA's Coffege of Engineering Manjar (Bk), Pune-412307

Principal

Dr.R.V. Patil

Pune District Education Association's flure of Engineering Manjari (Bk.), Pune - 412307

# Pune District Education Association's College of Engineering, Manjari (Bk), Pune



## **CERTIFICATE**

This is to certify that

- mo is to certify that	
Mr. Shripad Borade	B150260809
Mr.Shivam Shinolkar	B150260852
Mr.Sushant Sardar	B150260848
Ms.Prachi Belhekar	B150260802
Mr.Shubham Kadbe	B150260826

have successfully completed the project entitled "PLASMA REFREATION SYSTEM" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune University.

Date:

Place:

Guide

Prof.A.D.Gaikwad.

Head of Department

Prof.S.A.Patil

Head of Department
Department of Mechanical Engineering
PDEA's Codege of Engineering
Manjar (Bk), Pune-412307

External Examinar

Principal

DrpR.V. Patil

Fune District Education Association's College of Engineering Manjari (Bk.).

Pune - 412307

# Pune District Education Association's College of Engineering, Manjari (Bk), Pune.



# CERTIFICATE

This is to certify that

M. C 1111	ry that
Mr. Swapnil khese	B150260823
Mr. Prajwal Tope Mr. Pranit Salunkhe Mr. Vatan Waikar	B150260867
	B150260847
	B150260869

have successfully completed the project stage-II entitled "AUTOMATIC SEED SOWING MACHINE" under my supervision, in the partial fulfillment of Bachelor of Engineering-Mechanical Engineering, of Savitribai Phule Pune University. Date:

Place:

Guide

Prof. S. S. Shirsath

Head of Department

Dr. S. A. Patil

Head of Department

Department of Mechanical Engineering PDEA's College of Engineering Manjar (Bk), Pune-412307

External Examinar

Principal Dr. R.V. Patil

Principal

Pune District Education Association's College of Engineering Manjari (Bk.) Dillian William



RIN 185193 Date - 30° October 2020

## PROJECT COMPLETION CERTIFICATE

This is to certify that Miss. Shivani Satish Dhavale student of PDEA'S college of engineering (MBA Major in HR, under SSPU University Pune) has completed the project entitled STUDY EMPLOYEE DEVELOPMENTY AND MOTIVATION at NOMOUS GLOBAL PVT LTD under the guidance of Mr Datta Jadhav from 14<sup>th</sup> sept to 28<sup>th</sup> October for her academic requirement. We observed your work was satisfactory and we appreciate your sincere learning.

We wish you all the best for your future success.



NOMOUS GLOBAL PVT LTD

# RAJE AGRO FOODS PVT. LTD

Date - 1 September 2020

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Rohit Bharat Nikam has completed his Summer Internship Project under my direct supervision. He underwent the Summer Internship for 2 months during which he was assigned the task of reviewing documents related to export & import (Including all procedure of Export and Import) and contact to customers, which he has successfully completed and the same is presented in the form to present Project Report.

It is further certified that the project report submitted by Rohlt Nikam reflects his/her original work and based on the work assigned to him/her for the Summer Internship and that the present project report has not been submitted elsewhere for award of any degree, diploma or fellowship.

PUNE OF OLD

Signature of Supervisor

Suyash Sathe

#### (京都市即安,其市長

#### TO MINUSELLE WAY COME THE

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the book been interested in the project work and he was found postation has described and conformation or another.

Water wolch hom: all the best

SACIAN KACIAM

P. S. Manager





2019 MatunFinconcepts Date: 7 March

### TO WHOMSOEVER IT MAY CONCERN

This is to certify that "SANDEEP WAGHSING RAJPUROHIT" student of PUNE DISTRICT EDUCATION ASSOCIATION'S COLLEGE OF ENGINEERING, MANJRI, PUNE, has completed his project work and Internship on "A STUDY OF PROMOTIONAL STRATEGIES OF CITI BANK FOR CREDIT CARDS IN PUNE" in MATUN FINCONCEPTS Pvt.Ltd. During the period of his assignment, we found him sincere, hardworking and keen learner. We wish him all the very best for his future endeavors

Regards, For MATUN FINCONCEPT Pvt.Ltd AUTHORIZED SIGNATORY



## SANJAY & HYUNDAI



## CERTIFICATE

#### TO WHOM IT MAY CONCERN

This is certify that Mr. Lokare Ajit Dada student of MBA, second year form Pune District Education Association's College Of Engineering Manjari (Bk) Pune. Has successfully completed project work in our organization "A Study on Customer Satisfaction of Hyundai Motors at Sanjay Hyundai" With effect from 1 Oct To 30 Nov 2020 and has completed his project work successfully.

He took been interested in the project work and he was found punctual, hardworking and performance oriented.

We wish him all the best.

SANJAY @ HYUNDAI

Mr. Atul Kolhe,

Manager

Address: Old Mumbai - Pune Hwy, near Kamalnayan Bajaj Garden, Kohinoor Estate,

Wakadewadi, Shiyajinagar, Pune, Maharashtra 411003.

Website: www.sanjayhyundai.com

Regd Office Kirloskar House, Tuty, manufacture, rest. Tel (91)(020)66441730/66441714 Fax(91)(020)25887428

Emakedo@fleetguard fitrum Com

Web WWW.Beefguard fittrum. Com

# TO WHOMSOEVER IT MAY CONCERN

MBA second year of PDEA's collegeof engineering This is to certify that Mr. ANIL ANKUSH HAKE student of completed summer internship project report titled Manjari(BK) Hadapsar,Pune,41230,has successfully organization from 18 Oct.2020 to 15 Dec 2020. Operations and supply chain management in our

He has completed the summer internship project work to our satisfaction.

For Fleetguard Filters pvt. Ltd.

Bradi. Ramesh Mall People officer - HR

Increases Engine Life



Ultimate Protection

Change data it and another an appropriate financial to financia Australia designation of the contract of the c

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# TO WHOM TO EVER IT MAY CONCERN

This is to certify that Miss.Sheetal Patil Brijpuriya, MBA 2nd year student of

P.D.E.A college of Engineering Manjari (BK), Pune has worked on the summer internship project titled "Competitor analysis for online grocery business with respect to The Buyer Deals at Uruli Kanchan, Pune from 5th November 2020 to 22th December 2020, towards partial fulfillment of the course of master of business administration under the university of Pune.

She took Keen interest in his work &completed the project to our satisfaction with the best of his abilities. We found him to be sincere & hardworking in his efforts.

We wish her a bright future.

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The Buyer Deals, Pune.

Mr.Ankit Khira

(Sr. Marketing Executive)