SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **"Point of Interest Recommendation based on LBSNs"** carried out by **B H Sumanth (1SG15IS029), B Shivalinga Reddy (1SG15IS030), Chetan S C (1SG15IS040), Mohankumar B C (1SG15IS064)** bonafide students of 8th semester, Department of **Information Science & Engineering** at **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. VINEETHA B
Asst. Professor, ISE
Signature of the Guide

Dr. H R RANGANATHA
HOD, ISE
Signature of the HOD

Dr. K L SHIVABASAPPA
Principal, SCE
Signature of the Principal

Examiner

Name of the Examiner

Signature of the Examiner with date

1. Sudarsanan. D

1. .... 11|6|19

2. Rajkumar

2. .... 11.6

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560057

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkansandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **DATA MINING BASED RISK ESTIMATION OF ROAD ACCIDENTS** carried out by **ANVITHA B G(1SG15IS023),CHAITRA V (1SG15IS039),HARSHITHA D (1SG15IS048) ,HARSHAVARDHAN NAGNATH KACHARE (1SG15IS047)** , bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Signature of the Guide
Dr. H R RANGANATHA
Professor &Head

Signature of the HOD
Dr. H R RANGANATHA
Professor & Head

Signature of the Principal
Dr. K L SHIVABASAPPA
Principal

Examiner
Name of the Examiner
1. Sudarsanan. D
2. Rajkumar

Signature of the Examiner with date
1. 4/6/19
2.

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

SAPTHAGIRI COLLEGE OF ENGINEERING
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **GARBAGE MONITORING USING IOT WITH LOCATION TRACKING AND ALERT** carried out by **AADYA JHA (1SG15IS001) AYUSHI RAJ (1SG15IS028)** bonafide students of 8th semester, Department of **Information Science & Engineering** at **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Ambika S
Assistant Professor
Signature of the Guide

Dr. H.R. Ranganatha
Prof.& HOD
Signature of the HOD

Dr. K L Shivabasappa
Principal
Signature of the Principal

Reviewer

Name of the Examiner

Signature of the Examiner with date

1. ...Sudarsanni D...

1. ...11|6|19

2. ...Rajkumar...

2. ...

Principal
Sapthagiri College of Engineering
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Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING
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[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **MOVIES RECOMMENDATION USING COLLABORATIVE FILTERING** carried out by **Ms. ANANYA S RAO (1SG15IS016), Ms. ANJANA S HEGDE (1SG15IS016), Ms. BHUMIKA R H (1SG15IS035) and Ms. MEGHA G (1SG15IS061)** bonafide students of 8ᵗʰ semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering of the Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Gayathri R

H R Rao

Signature of the Guide
Prof. Gayathri R
Assistant Professor

Signature of the HOD
Dr. H R Ranganatha
HOD, I.S.E., S.C.E.

Signature of the Principal
Dr. K I. Shivabasappa
S.C.E., Bengaluru.

External Viva

Name of the Examiners	Signature of the Examiners with date
1. Sudarsana. D	1. .... 12/6/19
2.	2. .... 12/6/19

Principal
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SAPTHAGIRI COLLEGE OF ENGINEERING
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[AFFILIATED TO VISVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **"SMART CONTROL OF ELECTRICAL APPLIANCES USING IOT AND MOBILE APPLICATION"** carried out by **Abhishek D Hegde (1SG15IS004), Chitra S (1SG15IS041), Lahari Shekar B C (1SG15IS055), Lincoln Francis Fernandes (1SG15IS057)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Praneetha G N
Assistant Professor
Signature of the Guide

Dr. H R Ranganatha
Professor and HOD
Signature of the HOD

Dr. K L Shivabasappa
Principal
Signature of the Principal

<u>**Reviewer**</u>

Name of the Reviewer

Signature of the Reviewer with date

1. ....Sudarsanan J....

1. ....

2. ....

2. ....

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **Big Data Analytics : Predicting Academic Course Preference Using Hadoop Inspired Map Reduce.** carried out by **Kartik Kathuria (1SG15IS052), Gautham GS (1SG15IS044), Charan S (1SG14IS023)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2018-19. 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 said Degree.

Prof. SUDARSANAN D	Dr. H R RANGANATHA	Dr. K L SHIVABASAPPA
Asst. Professor, ISE	HOD,ISE	Principal, SCE
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

Examiner

Name of the Examiner	**Signature of the Examiner with date**
1. Sudarsanan. D	1. 12/6/19
2. Rajkumar	2. 12/6/19

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **DETECTION OF PHISHING WEBSITES USING MACHINE LEARNING** carried out by **NANDINI SRIDHAR(1SG15IS069), PRATHEEK G S (1SG15IS078), SEEMA N HUNKI (1SG15IS102), KATHYAYINI VJ (1SG15IS121)**, bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Ambika S
Assistant Professor
Signature of the Guide

Dr. H R Ranganatha
Head of Department
Signature of the HOD

Dr. K L Shivabasappa
Principal
Signature of the Principal

External Viva

Name of the Examiners

Signature of the Examiners with date

1. .....Sudarsan.)..........

1. .....Ruf 13|5|19.........

2. .....Hamsa.1.A.S.......

2. ....2......3|6|19.

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **Predicting Depression Using Social Media Posts** carried out by **MUKUL GAUR (1SG15IS066), PRANAV JAYAPRAKASH (1SG15IS077) , SAMEER A SHAH (1SG15IS098), SONU GUPTA (1SG15IS112)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

8/6/19	HR Raw	10/6
Prof. Divyashree G	Dr. H R Ranganatha	Dr. K L Shivabasappa
Professor	Head Of Dept	Principal
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

External Viva

Name of the Examiners

Signature of the Examiners with date

1. Sudarsanan J   1. 13/6/19

2. Hamsa A S   2. 13/6/19

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **SECURED CLOUD DATA PROCESSING SCHEME** carried out by **Mr. KUSHAL N K (1SG15IS067), Mr. PUNITH KUMAR M (1SG15IS082), Mr. RAKESH B J (1SG15IS089) and Mr. YATHINDRA S (1SG15IS125)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Kavyashree K	*H R Rony*	*(signature)*
Prof. Kavyashree K	Dr. H R Ranganatha	Dr. K L Shivabasappa
Assistant Professor		
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

External Viva

Name of the Examiners	**Signature of the Examiners with date**
1. Sudarsan	1. *(signature)* 12/6/19
2. Hamsa A S	2. *(signature)* 13/6/19

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **PRIVACY PRESERVANCE AND INTRUSION AVOIDANCE OF MEDICAL DATASET IN THE CLOUD** carried out by **RAHUL DEV (1SG15IS086), SAKET KUMAR (1SG15IS097), SHANTESHWAR PRASAD SINGH (1SG15IS103) and SHUBHAM (1SG15IS107)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Dr. M S Patel	Dr. H R Ranganatha	Dr. K L Shivabasappa
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

Reviewer

Name of the Reviewer

Signature of the Reviewer with date

1. ....Sudarsan D..........   1. ...... 15/6/19

2. ....Hamsa .A.S.....   2. ...... 13/6/19

Principal
Sapthagiri College of Engineering
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[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **FORECASTING PRICE FLUCTUATIONS OF BITCOIN USING NEURAL NETWORK** carried out by **NIKHITHA M S [1SG15IS072], PRAGATHI S NAYAK [1SG15IS076], SAMIKSHA S N [1SG15IS099], SHREYA S NADGIR [1SG15IS104]** bonafide student of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Signature of the Guide
Prof. Sowmya Somanath
Assistant Professor

Signature of the HOD
Dr. H R Ranganatha
Professor & HOD

Signature of the Principal
Dr. K L Shivabasappa
Principal

External Viva

Name of the Examiners

1. ....

2. ....

Signature of the Examiners with date

1. .... 18/6/19

2. .... 13/6/19

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **"VOICE ENABLED INTELLIGENT CASH FLOW FORECASTING AND PREDICTIVE ANALYSIS"** carried out by **SAHANA HEGDE (1SG15IS096), VAISHNAVI J (1SG15IS122)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Signature of the Guide
Prof. Vineetha B
Assistant Professor

Signature of the HOD
Dr. H R Ranganatha
Head of Department

Signature of the Principal
Dr. K L Shivabasappa
Principal

External Viva

Name of the Examiner	Signature of the Examiner with date
1. Sudarsan D	1. _____ 13/6/19
2. Hamsa A.S	2. _____ 13/6/19

Principal
Sapthagiri College of Engineering
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SAPTHAGIRI COLLEGE OF ENGINEERING
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[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **FACE DETECTION AND RECOGNITION BASED ATTENDANCE USING TENSORFLOW** carried out by **AKASH ANAND(1SG15IS012), BHARATHI V MUGALI(1SG15IS033), GORA ADITYA(1SG15IS045), HINA ISRATH MAB(1SG15IS049)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Chaithra B M	Dr. H.R. Ranganatha	Dr. K. L. Shivabasappa
Assistant Professor	Professor and HOD	Principal
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

Reviewer

Name of the Reviewer

Signature of the Reviewer with date

1. Sudarsanan

1. 12|6|9

2.

2. 17|6|19

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkansandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **TWITTER DATA ANALYSIS USING STREAMING   API** carried out by **AISHWARYA.U(1SG15IS011), ANUSHA.G.HEGDE(1SG15IS022),BHAGYASHREE.G(1SG15IS031),MEGHANA. C (1SG15IS062)** , bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2018-19. 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 said Degree.

Signature of the Guide
Dr. H R RANGANATHA
Professor &Head

Signature of the HOD
Dr. H R RANGANATHA
Professor & Head

Signature of the Principal
Dr. K L SHIVABASAPPA
Principal

Examiner
Name of the Examiner
1. Sudas Sarm i
2. Hamsa .A.S

Signature of the Examiner with date
1. 13|6|19
2. 13|6|19

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkansandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **TWITTER DATA ANALYSIS USING STREAMING API** carried out by **AISHWARYA.U(1SG15IS011), ANUSHA.G.HEGDE(1SG15IS022),BHAGYASHREE.G(1SG15IS031),MEGHANA. C (1SG15IS062)** , bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Dr. H R RANGANATHA	Dr. H R RANGANATHA	Dr. K L SHIVABASAPPA
Professor &Head	Professor & Head	Principal

Examiner

Name of the Examiner   **Signature of the Examiner with date**

1. Sudao Sany   1. .... 13 / 6 / 19

2. Hamsa .A.S   2. .... 13/6/19

SAPTHAGIRI COLLEGE OF ENGINEERING
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057.

Department of Information Science and Engineering

Certificate

Certified that the Mini Project Work entitled "Enhanced use of Input Devices using Magic Glove" carried out by **Shubham Kumar Singh (1SG15IS108)**, **Sundram Singh (1SG15IS116)**, bonafide students of **Sapthagiri College Of Engineering**, in partial fulfillment for the award of Bachelor of Engineering in Information Science and Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2018-2019. It is certified that all 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 in respect of Project Work (15CSP85) prescribed for the said degree.

Signature of the Guide
Prof. Divyashree G
Assistant Professor

Signature of the HOD
Dr. H R Ranganatha
Professor & Head

Signature of the Principal
Dr. K L Shivabasappa
Principal

EXTERNAL EXAMINATION

Name of the Examiners

Signature with Date

1. Sudarsann D

11|6|19

2. Rajkumar

11|6

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **SPATIOTEMPORAL ANALYSIS OF TWEETS** carried out by **HOLAMOGE NISHA VINOD (1SG15IS050), NISHA KUMARI (1SG15IS073), ROOPA M (1SG15IS092), SWETA PRIYA (1SG15IS118)** bonafide students of 8th semester, Department of **Information Science & Engineering** at **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Ravichandra M
Assistant Professor
Signature of the Guide

Dr. H R Ranganatha
Professor & Head
Signature of the HOD

Dr. K L Shivabasappa
Principal
Signature of the Principal

Examiner

Name of the Examiner

Signature of the Examiner with date

1. ....Sudarsanauri

1. ......12|6|19

2. ....

2. ....

Principal
Sapthagiri College
Chikkasandra, Hesaraghatta
Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING

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[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **SPATIOTEMPORAL ANALYSIS OF TWEETS** carried out by **HOLAMOGE NISHA VINOD (1SG15IS050), NISHA KUMARI (1SG15IS073), ROOPA M (1SG15IS092), SWETA PRIYA (1SG15IS118)** bonafide students of 8th semester, Department of **Information Science & Engineering** at **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the Visvesvaraya Technological University, Belagavi during the year 2018-19. 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 said Degree.

Prof. Ravichandra M	Dr. H R Ranganatha	Dr. K L Shivabasappa
Assistant Professor	Professor & Head	Principal
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

Examiner

Name of the Examiner

Signature of the Examiner with date

1. .....Sudarsanaurj.

1. .... 12/6/19

2. .....Rajkumar.....

2. ....12.6.19

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **"URBAN SOUND CLASSIFICATION USING CONVOLUTIONAL NEURAL NETWORK"** carried out by **Pallavi S (1SG15IS075) Radha G (1SG15IS083) Shubhashitha B R (1SG15IS111) Tanmayi M Hegde (1SG15IS119)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our **college Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Prof. Chaithra B M	Dr. H R Ranganatha	Dr. K L Shivabasappa
Assistant Professor	Head of Department	Principal, SCE
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

Examiner

Name of the Examiner   **Signature of the Examiner with date**

1. Sudarsanan D   1. .... 11|6|19

2. ....   2. ....

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **ELIMINATING PIRACY BY EMBEDDING SERIAL NUMBER** carried out by **Mr. PRIYESH SHRIVASTAVA (1SG13IS081), Ms. SAMRIDHI SONI (1SG15IS100), Mr. SHUBHAM SARVESH (1SG15IS110) and Mr. SUMIT KARAK (1SG15IS114)** bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Gayathri R
_____
Prof. Gayathri R
Assistant Professor
Signature of the Guide

H C Ranu
_____
Dr. H R Ranganatha
Head of Department
Signature of the HOD

_____
Dr. K L Shivabasappa
Principal
Signature of the Principal

External Viva

Name of the Examiners

1. ...Sudarsanan...

2. ...Hamsa A.S..

Signature of the Examiners with date

1. ...13/6/19

2. ...13/6/19

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057

[AFFILIATED TO VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **DOCUMENT CLUSTERING USING PSO AND K-MEANS ALGORITHM** carried out by **SAHANA H J [1SG15IS095], DIVYA A[1SG16IS400], KEERTHANA P S[1SG16IS401], RANJITHA T V [1SG16IS403]** bonafide student of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Dr. H R RANGANATHA
Professor & HOD
Signature of the Guide

Dr. H R RANGANATHA
Professor & HOD
Signature of the HOD

Dr. K L SHIVABASAPPA
Principle
Signature of the Principle

External Viva

Name of the Examiners

1. ....

2. ....

Signature of the Examiners with date

1. .... 12.6.19

2. ....

Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore- 560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **BUILDING A VERSION CONTROL SYSTEM IN HADOOP (HDFS)** carried out by **Mr. SANTHOSH S V (1SG15IS101), Mr. SHREYAS R (1SG15IS105), Mr. SHRIDHAR KESHAV HEGDE (1SG15IS106) and Mr. M MANIKANTAN (1SG16IS402)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering in Information Science & Engineering** of the **Visvesvaraya Technological University**, Belagavi during the year 2018-19. 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 said Degree.

Dr. M S Patel	**Dr. H R Ranganatha**	**Dr. K L Shivabasappa**
Professor		
Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**

External Viva

Name of the Examiners   Signature of the Examiners with date

1. ...S.Udarsana..:.D..   1. .....QH....12.6.19....

2. .....Re.Jkeenae.....   2. .....QL12.6.1.19.........

Principal
Sapthagiri College of Engineering
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Bangalore- 560 057

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **"AN APPROACH FOR BIGDATA SECURITY BASED ON HADOOP DISTRIBUTED FILESYSTEM "** carried out by **RAGHAVENDRA M R (1SG15IS084) , SUSHMA N (1SG151S117)** bonafide students of 8th semester, Department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University,** Belagavi during the year 2018-19. 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 said Degree.

Prof. KavyaShree K
Assistant Professor
Signature of the Guide

Dr. H R Ranganatha
Signature of the HOD

Dr. K L Shivabasappa
Signature of the Principal

Examiner

Name of the Examiner

1. Sholosauro

2. Hamsa .A.S

Signature of the Examiner with date

1. 13) 6|19

2. 13|6·|19

Principal
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[AFFILIATED TO VIVSVESWARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI]

SAPTHAGIRI
College of Engineering

Department of Information Science & Engineering

CERTIFICATE

Certified that the project work entitled **DEDUPLICATION OF ENCRYPTED BIG DATA IN CLOUD** carried out by **Ms. SHUBHADA D BADACHI (1SG13IS108), Ms. POOJA (1SG13IS077), Ms. M KAVYA (1SG12IS024) and Ms. RASHMI A (1SG13IS091)** bonafide students of 8th semester, department of **Information Science & Engineering** carried out at our college **Sapthagiri College of Engineering**, Bengaluru in partial fulfillment of the award of **Bachelor of Engineering** in **Information Science & Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year 2016-17. 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 said Degree.

Signature of the Guide	**Signature of the HOD**	**Signature of the Principal**
Prof. Ramya R	Prof. Prerana Chaithra	Dr. Aswatha Kumar M.
Asst. Prof., I.S.E., S.C.E	HOD, I.S.E., S.C.E	

Dr. Aswatha Kumar. M
Principal
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Name of the Examiners	Signature of the Examiners with date
1. Prof. Prerana Chaithra	1. ....
2. Mallamma C.C	2. ...... 28/6/17 ......