SASTRA DEEMED TO BE UNIVERSITY

(A University under section 3 of the UGC Act, 1956)

CSE300 / INT300 / ICT300 - MINI PROJECT

Project Guidelines

B. Tech.

School of Computing

SASTRA Deemed to be University

TIRUMALAISAMUDRAM

THANJAVUR — 613 401

TAMIL NADU, INDIA

Project Guidelines

Registration Process

a. Registration process starts in the month of July.

b. Project can be carried out either individually or in a group with maximum of three members.

c. Students have to select the guide based on the area of interest with consent of faculty and furnish the details in the "Guide form" available in project portal under print menu

d. Students have to submit the hardcopy of the "Guide form", duly signed by the student(s) and the project guide to the project committee.

e. Abstract of the project has to be drafted as per the guide lines given in Annexure-A after discussions with the project guide.

f. Soft copy of the abstract and base paper duly signed by the project guide, need to be upload in the project portal.

Evaluation

The assessment of project has the following components:

Continuous Internal Assessment: 50 marks
End Semester Assessment: 50 marks

The total out of 100 will be used for grade as per the Rules & Regulations

- Continuous Internal assessment for projects with supervisor(s) from SASTRA shall comprise of two graded reviews following the scheme as given in the table:

Component		**Marks**
Review panel	Review I	30
	Review II	30
	Average	30
Project supervisor's component		20
	Total	**50**

Reviews	Evaluation criteria	Marks
Zeroth Review	Not taken for evaluation Students will brief on the area or problem identified by them and shall also discuss on the likely objectives for their chosen project to the review panel. The feasibility of the project (considering technical, time and cost factors) will be ascertained. The problem identified / objectives shall be appropriate for project to be executed by a team or as an individual	NA
Review I	Problem formulation/ Objective & Motivation/ Literature review or survey	10
	Experimental Design / Mathematical Model / Solution Methodology / Methods & Procedures and so on (Methodology / Work plan)	10
	Work carried out	10
	Total	**30**
Review II	Design/analysis/experiments/fabrication and following of ethical practices & Results	10
	Interpretation/Understanding, Discussion & Conclusion(s) Failed attempts shall also be disclosed and learning from failed attempts or negative results are also acceptable	20
	Total	**30**

- The scheme of valuation for end semester shall be

	Evaluation criteria	Marks
Semester Examination	Project Report / Thesis	10
	Problem Formulation / Objective & Methods & Processes including experimental design, mathematical model and so on	15
	Results and Discussion	15
	Individual Contribution / Learning and Viva Voce	10
	Total	**50**

- Faculty panel for Continuous Internal Assessment and for Semester examination shall consist of at least 2 faculty members. Multiple panels shall be formed as per the requirement by the AD/ Dean. One faculty per review panel shall act as coordinator for the panel and shall ensure submission of records to the project coordinator. The AD/ Dean shall constitute the review panel and the project coordinator. The review panel shall be communicated to all students within one week from the date of commencement of the semester by the project coordinator. The students shall be assigned the panel based on the topic or broad area of their work.

- All members of the review panel shall individually assess and award marks to the student(s). The arithmetic mean of the marks awarded by members of the faculty panel shall then be taken as Marks for that review / examination

- During reviews for continuous internal assessment, the faculty members of the panel shall also make specific comments based on the data or material presented for the review. Such comments are also made available to the project supervisor

- The students will have to submit a copy of the project report (soft binding) adhering to the guidelines to the final exam panel. Any corrections suggested by the panel members should be incorporated and the corrected report should be submitted to the project committee within a week after the viva-voce examination
- Any student aggrieved with the evaluation of CIA component by the review panel may represent to the respective AD/Dean

Schedule for Reviews and Semester Examination

Tentative schedule for review are as follows

- **Zeroth:** Within fortnight from the commencement of the semester
- **First:** Between 5^{th} – 8^{th} week from the commencement of semester
- **Second:** Between 12^{th} - 15^{th} week from the commencement of semester
- **Synopsis submission:** 16^{th} week from the commencement of semester
- **Final viva voce:** Dates will be announced by the Controller of Examinations (CoE)

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Assessment scheme and the rubrics for award of marks

Review - 1: 30 Marks

I. Problem formulation/ Objective & Motivation/ Literature review or survey (Maximum marks: 10)	
	Marks
(a) Problem statement (5 marks)	
Clear definition and formulation of a problem statement	4-5
Fair definition and formulation of a problem statement	2-3
Poor/ill-defined problem statement	0-1
(b) Literature survey (5 marks)	
Exhaustive literature survey relevant to the problem	4-5
Satisfactory literature survey relevant to the problem	2-3
Inadequate literature survey	0-1
II. Methodology/Work plan (Maximum marks: 10)	
Detailed, well-defined, methodology/ work plan	8-10
Partial/incomplete methodology/ work plan	4-7
Ill-defined or unrealistic work plan	0-3
III. Work carried out (Maximum marks: 10)	
Clear evidence of work done in terms of carrying out analysis/fabrication/case studies/any other appropriate activity	8-10
Some work has been carried out	4-7
Very limited/no work has been carried out	0-3

Review - 2: 30 Marks

IV. Problem formulation/ Objective & Motivation/ Literature review or survey (Maximum marks: 10)	
	Marks
(a) Implementation of methodology (4 marks)	
Systematic implementation	4
Satisfactory implementation	2-3
Poor implementation	0-1
(b) Results (4 marks)	
Excellent presentation of data in terms of graphs, figures, tables & strict adherence to norms	4
Satisfactory presentation of data in terms of graphs, figures, tables & adherence to norms	2-3
Poor presentation of data & adherence to norms	0-1
(c) Adherence to codes, standards & ethical practices (2 marks)	
Full conformity	2
Partial conformity	1
Non-conformity	0
V. Interpretation/Understanding, Discussion & Conclusion(s) (Maximum marks: 20)	
(a) Interpretation (10 marks)	
In-depth analysis of data and interpretation of results	8-10

Satisfactory analysis of data	4-7
Insufficient/poor analysis	0-3
(b) Discussion (5 marks)	
Elaborate discussion with professional etiquette	4-5
Satisfactory discussion	2-3
Poor/insufficient discussion	0-1
(c) Attainment of Objectives/ Inferences/ Conclusions (5 marks)	
Successful attainment of objectives / meaningful inferences & conclusion(s)	4-5
Satisfactory attainment of objectives / reasonably meaningful inferences /conclusion	2-3
Non-attainment of objectives/no meaningful inference/conclusion	0-1

Guide's Evaluation: 20 Marks

VI. Project Report (Maximum marks: 10)	
	Marks
(a) Formatting (2 marks)	
Project report is prepared as per the format; references and citations are adequate	2
Major part of the report is as per the format with acceptable citations	1
Project report is not prepared according to format	0
(b) Technical content (5 marks)	
Report is well-written technically with excellent presentation of data in terms of graphs, figures, tables, discussion, inference/conclusion	4-5
Report is satisfactory with data, discussion and inference/conclusion	2-3
Report is unsatisfactory/poor	0-1
(c) Originality (3 marks)	
Similarity index is less than 10 %	3
Similarity index is between 10 % and 25 %	2 (Revision, if required)
Similarity index is between 25 % and 40 %	1 (Thesis requires re-submission)
Similarity index is greater than 40 %	0 (Thesis requires re-submission)

* While assessing the Similarity index, common phrases, known equations, nomenclature, generic terms and references are to be excluded.

VII(A). Assessment of Individual's Contribution to the Team (Maximum marks: 10)	
	Marks
(a) Synopsis (5 marks)	
Reflective report of the Synopsis correlates with the individual's contribution and learning	4-5
Reflective report of the Synopsis partially correlates with the individual's contribution and learnings	2-3

Synopsis partially correlates /does not correlate with the individual's contribution and learnings	0-1
(b) Individual's contributions (5 marks)	
Individual's contribution in the execution of the project is evident through project diary/lab note, self and peer evaluation forms	4-5
Individual's contribution in the execution of the project is partly evident through project diary/ lab note, self and peer evaluation forms	2-3
Individual's contribution is not evident	0-1

***VII(B). Assessment of Individual's Learnings from the project (Maximum marks: 10)**	
	Marks
(a) Synopsis (5 marks)	
Reflective report of the Synopsis clearly describes the learnings	4-5
Reflective report of the Synopsis partly describes the learnings	2-3
Synopsis poorly describes/does not describe the learnings	0-1
(b) Individual's contributions (5 marks)	
Execution of the project is evident through project diary/ lab note	4-5
Execution of the project is partly evident through project diary/ lab note	2-3
Execution of the project is poor/unsatisfactory	0-1

* - for individual projects only

End Semester Evaluation: 50 Marks

I. Problem Formulation / Objective, Methods & Processes including experimental design, mathematical model and so on (Maximum Marks: 15)	
	Marks
(a) Problem statement/objective (3 marks)	
Clear definition and formulation of a problem statement/objective	4-5
Fair definition and formulation of a problem statement/objective	2-3
Poor/ill-defined problem statement/objective	0-1
(b) Literature survey (4 marks)	
Exhaustive literature survey relevant to the problem	4-5
Satisfactory literature survey relevant to the problem	2-3
Inadequate literature survey	0-1
(c) Methodology/Work plan (8 marks)	
Detailed, well-defined, methodology/ work plan	7-8
Partial/incomplete methodology/ work plan	3-6
Ill-defined or unrealistic work plan	0-2
II. Results and Discussion (Maximum marks: 15)	
(a) Quantum & Quality of Work (2 marks)	
Clear evidence of work done in terms of carrying out analysis/fabrication/case studies/any other appropriate activity	2
Some work has been carried out	1
Very limited/no work has been carried out	0
(b) Results (3 marks)	
Excellent presentation of data in terms of graphs, figures, tables & strict	3

adherence to norms	
Satisfactory presentation of data in terms of graphs, figures, tables & adherence to norms	1-2
Poor presentation of data & adherence to norms	0
(c) Adherence to codes, standards & ethical practices (2 marks)	
Full conformity	2
Partial conformity	1
Non-conformity	0
(d) Interpretation (6 marks)	
In-depth analysis of data and interpretation of results	5-6
Satisfactory analysis of data	2-4
Insufficient/poor analysis	0-1
(e) Discussion (2 marks)	
Elaborate discussion with professional etiquette	2
Satisfactory discussion	1
Poor/insufficient discussion	0
III. Project Report / Thesis (Maximum marks: 10)	
(a) Formatting (3 marks)	
Project report is prepared as per the format; references and citations are adequate	3
Major part of the report is as per the format with acceptable citations	1-2
Project report is not prepared according to format	0
(b) Technical content (7 marks)	
Report is well-written technically with excellent presentation of data in terms of graphs, figures, tables, discussion, inference/conclusion	6-7
Report is satisfactory with data, discussion and inference/conclusion	3-5
Report is unsatisfactory/poor	0-2
IV. Individual Contribution/Learning and Viva Voce (Maximum marks: 10)	
(a) Application of conceptual knowledge (5 marks)	
Application of knowledge is clearly evident	4-5
Limited application of knowledge	1-3
No evidence	0
(b) Viva Voce (5 marks)	
Answered most of the questions of the panel	4-5
Able to answer some of the key questions	2-3
Most of the questions not answered	0-1

Assessment Scheme for Review - I of Project

S. No	Name	Reg. No.	Problem formulation/ Objective & Motivation/ Literature review or survey (10)		Experimental Design / Mathematical Model / Solution Methodology / Methods & Procedures and so on (Methodology / Work plan) (10)	Work carried out (10)	Total (30)	Remarks
			Problem statement (5)	Literature survey (5)				
1								
2								

Assessment Scheme for Review - II of Project

S. No	Name	Reg. No.	Design/analysis/experiments/fabrication and following of ethical process in the same & Results (10)			Interpretation/Understanding, Discussion & Conclusion(s) (20)			Total (30)	Remarks
			Implementation of methodology (4)	Results (4)	Adherence to codes, standards & ethical practices (2)	Interpretation (5)	Discussion (5)	Attainment of Objectives/ Inferences/ Conclusions (5)		
1										

Project Supervisor's Mark (20)

S. No	Name	Reg. No.	Project Report (10)				Assessment of Individual's Contribution to the Team / Assessment of Individual's Learnings from the project (10)	Total (20)	Remarks
			Formatting (2)	Technical content (5)	Originality (3)	Synopsis (5)	Individual's contributions/ Execution of project (5)		
1									
2									

Assessment Scheme for End Semester Examination of Project

S. No	NAME	Reg. No	I. Problem Formulation / Objective & Methods & Processes including experimental design, mathematical model and so on (15)			II. Results and Discussion (15)					III. Project Report / Thesis (10)		IV. Individual Contribution / Learning and Viva Voce (10)		Total (50)	Remarks
			I. (a)	I. (b)	I. (c)	II. (a)	II. (b)	II (c)	II. (d)	II(e)	III(a)	III. (b)	IV. (a)	IV. (b)		
1																
2																

I. (a): Problem statement/objective (3)
I. (b): Literature survey (4)
I. (c): Methodology/Work plan (8)
II. (a): Quantum & Quality of Work (2)
II. (b): Results (3)
II. (c): Adherence to codes, standards & ethical practices (2)
II. (d): Interpretation (6)
II. (e): Discussion (2)
III. (a): Formatting (3)
III. (b): Technical content (7)
IV. (a): Application of conceptual knowledge (5)
IV. (b): Viva Voce (5)

GUIDELINES TO PREPARE PROJECT REPORT

STYLE NOTES FOR PROJECT REPORT PREPARATION

Use A4 (210 mm x 297 mm) bond un-ruled paper (80 GSM) for all copies submitted. Use one side of the page for all printed/typed matter. It should be hard bound with light blue title page for final semester project. For mini project, do soft binding with cover page on photo finish paper

Numbering

Pages

Every page in the Project report, except the title page, must be accounted for the page numbering, starting from acknowledgements and till the beginning of the introductory chapter, should be printed in small **Roman numbers, i.e., i, ii, iii, iv, etc.**,

All printed page numbers should be located at the bottom centre of the page, 17 mm (2/3") from the bottom edge, using normal print.

Chapter

Use only Arabic numerals. Chapter numbering should be centre on the top of the page using large bold print.

Example: **CHAPTER 1**

Sections

Use only Arabic numerals with decimals. Section numbering should be left justified using bold print.

Example:
1.1, 1.2, 1.3, etc.

Equation(s)/ Formula(e)

Use only **Arabic numerals** with single decimal. Equation numbers should be right justified using normal print. Mathematical symbols should be printed in *italics.*

Format: (<Chapter number>.<Equation serial number)

Example:

$$\varepsilon = \left[\frac{2\cot\left(\phi + \frac{\psi}{2}\right) + \psi \cos ec\left(\phi + \frac{\psi}{2}\right)}{\sqrt{3}} \right] \qquad (1.1)$$

$$\int_0^{\bar{\varepsilon}_f} \sigma_\theta d\bar{\varepsilon} = C_1 \tag{1.2}$$

$$I_1(\bar{\varepsilon}_f) = \frac{2}{3}(2\alpha+1)\int_0^{\bar{\varepsilon}_f} \bar{\sigma} d\varepsilon_z = \frac{2}{3}(2\alpha+1)\frac{k(\bar{\varepsilon}_f)^{n+1}}{n+1} \tag{1.3}$$

Please note that the equation numbers are flush right in normal print.

TEXT

Colour: Black print
Font:

Regular text	- Times New Roman 12 pts., and normal print.
CHAPTER HEADINGS	Time New Roman 14 pts. And **bold** print and all capitals.
SECTION HEADINGS	Time New Roman 12 pts. And **bold** print and all capitals.
Subsection Headings	Time New Roman 12 pts. And **bold** print and leading capitals, i.e., only first letter in each word to be the capital.
Special Text	Italics/Superscript/Subscript/Special symbol, etc, as per necessity. Special text may include footnotes, endnotes, physical or chemical symbols, mathematical notations, etc.
References	Same font as regular text. Serial number and all authors names to be in bold print. Journal names and book titles in italics. For format see Annexure 9.

Spacing:

Use **1.15 spacing** between the lines.
Use **a single blank line** between paragraphs.

All paragraphs in the project report should be justified from the first line the last line.

Use **double spacing** between the regular text and quotations.

Provide **one blank line** between:

(a) Chapter title and first sentence of a Chapter.

Use single line spacing:

(a) In footnotes and endnotes for text,
(b) In explanatory notes for tables and figures.
(c) In text corresponding to bullets, listings, and quotations in the main body of the thesis.

Use **single space** in references and **double space** between references.

Justification: The text should be **fully justified.**

Hyphenation should be avoided as far as possible.

Text corresponding to bullets and listings should be indented.

Quotations from other research work must be indented on the left and the right if they are longer than two lines. Shorter quotations can be included as a part of the regular text.

Windows & Orphans: At the bottom of a page, a paragraph should have atleast two lines. Similarly, at the top of a page, a paragraph should end with atleast two lines.

MARGINS

The margins for the regular text are as follows:

LEFT	= 1.25”
RIGHT	= 1”
TOP	= 1”
BOTTOM	= 1”

Please note that the bottom of the page numbers should be 17 mm above the bottom edge of the numbered pages.

TABLES

A sample for tables is provided in page 27

All tables should have sharp lines, drawn in black to separate rows/columns as and when necessary.

Tables should follow immediately after they are referred to for the first time in the text. Splitting of paragraphs, to include tables on a page, should be avoided. Provide **three spaces** on the top and the bottom of all tables to separate them from the regular text, wherever applicable.

The last line of the title of any table should be 10 mm to 15 mm **above the top-most horizontal line of the table**, and the title should be centered concerning the table. The titles must be in the same font as the regular text and should be single-spaced. The title format is given below:

Table<blank><chapter number>.<serial number><left indent><table title>.

Example (of a small table which is sought to be placed within the text):

Table 1.1 Results of the simulation experiment.

The contents of the table will be within the surrounding double line (which indicates the top-most, left-most, right-most, and bottom-most boundaries of the table)

Whenever a table exceeds one-page present the full title of the table on the first page and on the following pages, provide the table number and state "(cond.)" after it.

Example: (notice the left justification)

Table 1.2 (contd.)

Wherever explanatory notes are used for clarifying any information presented in the tables, print them after leaving a single space immediately below the tables.

All tables in landscape format must be placed such that their top portions are near the binding of the thesis and their bottom portions near the outer edge.

FIGURES

Sample figure is shown in page 28

All figures, drawings, and graphs should be drawn in black with sharp lines and adequate contrast between different plots if more than one plot is present in the same graph.

Figures should follow immediately after they are referred to for the first time in the text. Splitting of paragraphs, to include figures on a page, should be avoided. Provide three spaces on the top and the bottom of all figures to separate them from the regular text, wherever applicable.

The first line of the title for figures, drawings, graphs and photos should be between 10 mm and 15 mm below the bottom, and they should be centred concerning the figure. The titles must be in the same font as the regular text and should be single-spaced. The title format is given below:

Fig.<blank><chapter number><serial number><left indent><figure title>.

Example:

Fig. 1.1.Stability of the Neuroprosthetics.

Wherever a figure exceeds one page (as in the case of large flow charts for computer programmes) present the full title of the figure on the first page and in the following pages provide the figure number and state "(contd.)" after it.

Example: (notice the left justification)

Fig.1.1 **(contd.)**

When there are many plots in a single graph or figure, the lettering, labelling or numbering of each plot for its identification should be of a size such that even after size reduction in the report, the identification should be legible.

All Figures in landscape format must be placed such that their top portions are near the binding of the report and their bottom portions near the outer edge.

PHOTOS

Use Colour photos only if they are necessary. Remember that the report may have to be photocopied. In case Colour photos are used, all copies of the report must contain only colour photos.

Photos may be printed on glossy paper, and be mounted with white case in (e.g., Elmer's glue), glue stick, dry mounting tissue, or any good adhesive. Do not use rubber cement or cello tape.

Each photo should be numbered and referred to as a figure. Photo titles should be similar to those provided for figures.

DRAWINGS

Drawings which are larger than A4 size are not encouraged. If larger drawings are absolutely necessary they may be suitably folded to A4 size in the report.

Each drawing should be numbered and referred to as a figure. Drawing titles should be similar to those provided for figures.

FOOTNOTES

In presenting footnotes and references, use a consistent form acceptable in your discipline.

PUNCTUATION

Please refer to any standard style manual such as the Chicago *Manual of Style*[1], where rules of punctuation are clarified. Student must note that different styles are in practice these days.

For example, some people insert a full stop before ending a sentence in double quotes, whereas other inserts the full stop after the double quotes. Both styles are in practice.

STATISTICAL ANALYSIS

Statistical methods used to analyse the data should be clearly mentioned in the methodology section. Meaning of symbols used in the graphs should be clearly explained in the legends for figures and graphs.

[1] Chicago *Manual of Style, Prentice Hall of India, New Delhi, 1989*

APPENDICES

If the project requires clearances from competent authorities such as Institutional ethics committee (IEC), Institutional Biosafety Committee (IBC), etc., a copy of the approval letter/s should be appended in the appendix.

REFERENCES

Adewole DO, Serruya MD, Harris TP, Burrell JC, Petrov D, Chen HI, Wolf JA and Cullen DK (2016) The evolution of neuroprosthetic interfaces. *Critical Reviews in Biomedical Engineering, 44, 123-152.*

Andersen RA, Kellis S, Klaes C and Aflao T (2014) Toward more versatile and intuitive cortical brain-machine interfaces. *Current Biology, 24, R885-R897.*

Bensmaia SJ (2015) Biological and bionic hand: natural neural coding and artificial perception. *Philosophical Transactions of the Royal Society London B Biological Sciences,* 19, 370 (1677).

Ghafoor U, Kim S and Hong KS (2017) Selectivity and longevity of peripheral nerve and machine interfaces: A review. *Frontiers in Neurorobotics, 11, 59.*

Knutson JS, Fu MJ, Sheffler LR and Chae J (2015) Neuromuscular electrical stimulation for motor restoration in hemiplegia. *Physical Medicine and Rehabilitation Clinics of North America, 26 (4), 729-745.*

Sanchez JC (2016) Neuroprosthetics: Principles and Applications. *CRC Press (USA).*

Slutzky MW and Flint RD (2017) Physiological properties of brain-machine interface input signals. *Journal of Neurophysiology, 118, 1329-1343.*

Tabot GA, Kim SS, Winberry JE and Bensmaia SJ (2015) Restoring tactile and proprioceptive sensation through a brain interface. *Neurobiology of Disease, 83, 191-198.*

SIMILARITY CHECK REPORT

- A report on similarity check obtained from Turnitin® shall be submitted along with the project report/ thesis.
- No more than three words in a sentence should be taken from a previous report or publication. Use quotation mark and cite the reference where words and sentences are taken from another work.
- If a figure, table or any data is reproduced from a previous study, prior permission from competent authority should be obtained. Make a mention of the authority from which such permission was obtained.
- References should be cited appropriately when information from previous studies are mentioned in the project report.

SYNOPSIS

Project Team No:

Register No: **Name:**

1. Write Full Name as per records

2.

3.

Project Title: Project Title to be Typed Using Title Case

Name of the Guide: Name of the guide with affiliation

Abstract

Use this template to prepare the synopsis of the project report. Present here the broad outline of the work that you carried out / focus of the mini project / semester project. These can also include but not restricted to literature survey, objectives identified, experimental and/or modelling methodology adopted, outline of experiments carried out / summary of important results and so on. No need for add any figure or table in this document. No references are required. Use Times New Roman, 12 pt, 1.5" spacing, justify alignment. Maximum no. of words for abstract is 600 and should not exceed ONE A4 sheet. Type the outline as single paragraph. Kindly stick to the format given for submission of synopsis. After the second review meeting, get the signature of the guide and submit the hardcopy to project coordinator. In case of group project each student shall submit an individual synopsis and the synopsis will additionally include the following

Specific Contribution

- **********

Specific Learning

- **********

Technical Limitations & Ethical Challenges faced

- **********

Keywords: *Enter 3 – 5 key words that describe your work – Use Times New Roman, 10 pt, Italics*

Name & Signature of the Student **Signature of Guide**

Date:

TITLE OF THE PROJECT

(14 POINTS, BOLD, TIMES NEW ROMAN,1.5 LINE SPACE)

Report submitted to the SASTRA Deemed to be University
as the requirement for the course

CSE300 / INT300 / ICT300 - MINI PROJECT

Submitted by

NAME (12 POINTS, BOLD, TIMES NEW ROMAN)
(Reg. No.: XXXXXXXXX, Programme)
NAME (12 POINTS, BOLD, TIMES NEW ROMAN)
(Reg. No.: XXXXXXXXX, Programme)
NAME (12 POINTS, BOLD, TIMES NEW ROMAN)
(Reg. No.: XXXXXXXXX, Programme)

December 2021

SCHOOL OF COMPUTING

THANJAVUR, TAMIL NADU, INDIA – 613 401

SCHOOL OF COMPUTING

THANJAVUR – 613 401

Bonafide Certificate

This is to certify that the report titled "**Project Title (Title Case – First Letter Caps)**" submitted as a requirement for the course, CSE300 / INT300 / ICT300: **MINI PROJECT** for B.Tech. is a bonafide record of the work done by **Mr. *****(Reg. No.120******, Programme**) (Names with register no in bracket of all members in ascending order of Register no.) during the academic year 2021-22, in the School of Computing, under my supervision.

Signature of Project Supervisor :
Name with Affiliation :
Date :

Mini Project *Viva voce* held on _____

Examiner 1 **Examiner 2**

Acknowledgements

List of Figures

Figure No.	Title	Page No.

List of Tables

Table No.	Table name	Page No.

Abbreviations

The student must take utmost care in the use of technical abbreviations. For example, “KM” stands for “Kelvin Mega” and not kilometre (which should be abbreviated as km) and “gms” stands for “gram meter second” and “grams” (which should be abbreviated as g). In addition, abbreviations pertinent to any specific discipline should be listed in alphabetical order as shown below.

AI	Artificial Intelligence
BMI	Brain Machine Interface
CED	Cardiovascular Electronic Device
CNT	Carbon Nano Tube
EPS	Extracellular Polymeric Substances
ICMS	Intracortical Microstimulation
NMES	Neuromuscular Electrical Stimulation
NMJ	Neuromuscular Junction
PNI	Peripheral Nerve Interfaces
QS	Quorum Sensing

Notations

The student must explain the meaning of special symbols and notations used in the thesis. Define English symbols, Greek symbols, and Miscellaneous symbols separately. Some examples are presented below.

English Symbols (in alphabetical order)

k_d	Microbial decay coefficient
K_s	Substrate concentration when growth rate is half of maximum
bp	base pair
ml	Mililiter
cm	Centimeter
K	Kelvin
Hz	Hertz

Greek Symbols (in alphabetical order)

α	Rate
$\sigma(x)$	the standard deviation of x
$\sum$	Summation
Ω	Ohm
∞	Infinity

Miscellaneous Symbols (in alphabetical order)

$\lvert x \rvert$	absolute value of x

Abstract

More users prefer to post their reviews for the products for sharing their opinions. These reviews play a vital role in helping other consumers to buy products. There is a higher chance of getting fake reviews for either promoting or demoting a particular product or brand. Hence detection of fake reviews is necessary.

In order to detect fake reviews, suspicious time interval of occurrence of fake reviews is determined using algorithm. The reviews obtained at this time interval is very large. And all the reviews at this time interval will not be fake as review count may increase due to seasonal sale. To extract fake reviews among them detection metrics are applied. After detecting the suspicious time interval, the detection metrics like context similarity, author's activeness, author's rating behaviour are used. Including these detection metrics review attributes like reviewer ID, date, product name are used. The spam score value of the reviewer is used for detecting spammers. This helps in detecting fake reviews with more accuracy and provides valid reviews for consumers for purchasing a product.

KEY WORDS: Fake Review, Spam, Suspicious interval detection

Table of Contents

CHAPTER 1

SUMMARY OF THE BASE PAPER

Summary of the base paper (Maximum 3 pages) should have:

Title, journal name, publisher, year, indexed in Scopus/SCIE/SCI

- The content, novelty/contribution of the base paper has to be presented
- What research has been addressed and what is the solution proposed by the authors
- Architecture and algorithm proposed and its correctness

These contents have to be written by the student after going through the base paper. Refer Abstract, Introduction and Proposed methodology)

CHAPTER 2

MERITS AND DEMERITS OF THE BASE PAPER

Merits and Demerits: (Maximum 3 pages)

What are the existing techniques for the same problem or related works? (See literature review/ related work column of the paper)

What are the merits and demerits over the proposed techniques over the existing techniques? (Refer the Materials & Methods/ Results and discussion column of the paper that compares with the existing techniques)