DEPARTMENT

OF

COMPUTER SCIENCE AND ENGINEERING

GUIDELINES FOR THE PREPARATION OF SUMMER INTERNSHIP REPORT

GITAM INSTITUTE OF TECHNOLOGY

GITAM

(Deemed to be University)

1. DOCUMENTATION SPECIFICATIONS

1.1 Size

1. Documentation should be preferably not exceeding 50 pages (not considering the prefacing materials of the work that are paginated in small Roman numerals; see the section on Page Numbering).

2. A4 is the recommended paper size.

1.2 Paper

3. Use A4 (210mm x 297mm) bond un-ruled paper (80 GSM) for all Thesis copies submitted.

4. The documentation should be printed on one side only.

5. Oversized figures and tables, if any, should be reduced to fit with the size of the documentation but the reduction should not be so drastic as to impair the clarity of their contents.

1.3 Binding

6. The spine of the thesis should be provided with title of the thesis, the year of submission and the name of the candidate(s).

2. FORMAT FOR THE DOCUMENTATION

2.1 Font

7. The font type should be Times New Roman for text throughout the document.

8. The font size for the regular text in the document should be 12 point and normal print.

9. The font size for chapter headings should be 15 point and bold print and all capitals.

10. The font size for section headings should be 12 point and bold print and all capitals.

11. The font size for subsection headings should be 12 point and bold print and

title case.

12. The font size for References should be 11 point and normal print. Bold print is to be used for the volume of the journal, page nos. and year of publication; the latter to be kept within brackets. Journal/book name and title can be in italics…….(please look into the suggestions on ***sample page 10***)

2.2 Line Spacing

13. Use 1.5 spacing between the lines.

14. Use one space between consecutive paragraphs.

15. All paragraphs in the document must be left justified completely (including the first line).

16. Provide single space between Chapter title and first sentence of a Chapter, and Last line of a section / sub-section and the title of the next section / sub-section.

17. Use 1.5 spacing between the title of the section / sub-section and the text

18. Use single space between the Last line of a section / sub-section and the figure

19. Use single space between the Last line of a section / sub-section and title of the table.

20. Use single space between the caption of the table and the table.

21. Use single space between the table / caption of the figure and the next paragraph.

22. Use one and half space in references and double space between references (s***ee sample page 10)***.

2.3 Margins

23. A margin of 2.5 cm (1 inch) is to be given on the binding edge while on the other side's it is to be 1.5 cm. The text of the thesis, including headings, figures, tables, and notes, but excluding page numbers, must be

accommodated within the page area.

2.4 Tables, Figures and Equations

24. All tables (tabulated data) and figures (charts, graphs, maps, images, diagrams, etc.) should be prepared, wherever possible, on the same paper used to type the text and conform to the specifications outlined earlier. They should be inserted as close to the textual reference as possible **(*see sample pages 8 & 9)***. If borrowed from others, it should be acknowledged below the table, map, chart, figure, diagram etc.

25. Tables, figures and equations should be numbered sequentially either throughout the document or Chapter-wise using Arabic numerals. They are referred to in the body of the text capitalizing the first letter of the word and number, as for instance, Table 17, Figure 24, Equation (33), or Table 5.3, Figure 3.11, Equation (4.16).

26. If tables and figures are of only half a page or less, they may appear on the same page as text but separated above and below by double line spacing. Font size for title text should be the same as for the general text.

27. Good quality Line Drawings/figures must be drawn using standard software that provides vector rather than bit-map graphics. Figures must be scalable. *Images, Photographs, etc*. must be scanned in resolution exceeding 200dpi with 256 grayscales for the monochrome images and 24 bit per pixel for the color images.

2.5 Page Numbering

28. Page numbers for the preface/acknowledgements materials of the document shall be in small Roman numerals and should be centered at the bottom of the pages.

29. Page numbers for the body of the thesis should be in Arabic numerals and should be centered at the bottom of the pages. The pagination should start with the first page of Chapter 1 and should continue throughout the text (including tables, figures, and appendices)

3. PREPARATORY MATERIAL

3.1 Acknowledgements/Preface

30. Acknowledgements and Preface should be limited to a maximum of one

page each or two pages if combined.

3.2 Body of the Documentation

31. The documentation should be written in either British or American English, not in a mixed mode. However, because of increasing acceptance of both styles and blurring of the distinction between the two, what is important is that consistency should be maintained throughout the text. However, use of standard dictionaries like Oxford chambers dictionary / Oxford learners dictionary is suggested for spellings, symbols, quotations, punctuation etc.,

32. Each chapter should be numbered in Roman followed by its title (e.g., 1. Introduction, etc.). The chapter title shall be printed bold and in 15-point font ***(see sample page 7).***

33. Units should be in International System of Units (SI) format.

3.3 References *(See sample page 10)*

34. Author-year style of referencing is preferred for a Documentation of the University **(s*ee sample page 10)***. Foot note must be given at the bottom of the page. It should not be combined with reference. All references cited in a chapter may be given at the end of each chapter/at the end of the all chapters.

35. References ***(see sample page 10)*** – All research sources including those not mentioned in the body of the thesis have to be given.

3.4 Appendices/Annexure

36. Each appendix/annexure should be labeled (e.g., Appendix A, Appendix B, etc.).

37. It should also have a title.

38. Appendices/Annexure should be listed in the Contents.

Sample Page 1

THE TITLE OF THE WORK

SHALL LOOK EXACTLY LIKE THIS TITLE

('Times New Roman' – 16-point size –Bold – centered)

An Internship Report submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

Submitted by

(Font: Times New Roman-12)

Name of the candidate(s), Hall Ticket Number

Under the esteemed guidance of

Name of the Supervisor

Designation, Company Name

(2 lines gap) - 'Times New Roman' – 14-point size – Bold - centered

(2 lines gap) – Square Logo of GITAM University – 1.5 inch side

DEPARTMENT OFCOMPUTER SCIENCE & ENGINEERING

GITAM

(Deemed to be University)

VISAKHAPATNAM

MONTH YEAR

(1 line gap) - 'Times New Roman' – 14-point size – Bold – centered

Sample Page 2

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GITAM INSTITUTE OF TECHNOLOGY

GITAM

(Deemed to be University)

DECLARATION

We, hereby declare that the internship review entitled "**TITLE OF THE INTERNSHIP**" is an original work done in the Department of Computer Science and Engineering, GITAM Institute of Technology, GITAM (Deemed to be University) submitted in partial fulfillment of the requirements for the award of the degree of B.Tech. in Computer Science and Engineering.

The work has not been submitted to any other college or University for the award of any degree or diploma.

Date:

Registration No. **Name** **Signature**

Sample Page 3

ACCEPTANCE LETTER FROM THE ORGANISATION/ COMPANY

Sample Page 4

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GITAM INSTITUTE OF TECHNOLOGY

GITAM

(Deemed to be University)

CERTIFICATE

This is to certify that the internship report entitled "**TITLE OF THE INTERNSHIP**" is a bonafide record of work carried out by **Name of the Candidate(s) (Registration No.)** students submitted in partial fulfillment of requirement for the award of degree of Bachelors of Technology in Computer Science and Engineering.

SUPERVISOR **INTERNSHIP REVIEWER**

<Name> **<Name of the Faculty>**

<Designation> **<Designation>**

Sample Page 5

TABLE OF CONTENTS

NOTE: Enter the table of contents in table format and then specify "no borders" in table border specification.

Description

1. Abstract

An abstract is a brief synopsis or summary of the most important points of the internship. It is a highly condensed version of the internship report itself. After reading the abstract, the reader must be able to gather all the main points of your internship.

2. About Organization

A brief description about the organization, the benefits of selecting it and work done by them.

3. Schedule of the Internship (Training)

Describe the work done by the student throughout the internship on a weekly basis. Dates and the work done during the week must be mentioned.

4. Internship Activities

4.1. Training (Optional)

Details about the training undertaken in the organization and its relevance to the internship.

4.2. Role in Application Development

A detailed description about the role in the internship and the work that has been done. If it is a group work, clearly specify the role that the individual has played.

4.3. Methodologies and functionalities

A detailed description on the functionalities and methods used in the development of the application. It should also include flowcharts to depict the application.

5. Outcomes

The results and outcomes of the application must be specified along with relevant

screenshots and pictures.

6. **Assessment of Internship**
   The certificate of completion along with the grades assigned to you by your mentor or organization head.
7. **References**
   Mention all the sources (books or articles) from where the information for the application has been taken.

Sample Page 6

References

Appendix A: Title of Appendix A Appendix B: Title of Appendix B Appendix C: Title of Appendix C

List of Research Papers based on the thesis.

Sample Page 7

6. DATA PREPROCESSING

6.1 INTRODUCTION

Weather data of various stations in and around Visakhapatnam was collected from IMD. An important step in the data mining process is data pre-processing. One of the challenges is that the meteorological data is poor in quality. For this reason data has to be carefully prepared to obtain accurate results. Since weather data is in the form of time series, smoothness and consistency of the data must be preserved in the pre-processing stage.

6.1.1 Classification

Classification has been utilized in many meteorological applications; for example classifying to predict the weather on a particular day will be “sunny”, “rainy” or “cloudy”. In this project we classified the geographical location based on its climate and also classified weather conditions based on the agricultural crops suitable to cultivate on each climate. In this project methods that can produce useful rules like decision tree were adopted. These rules were utilized as prediction statements.

Sample Page 8

5.3 PREDICTION

Prediction is the most used data mining task in the field of meteorology. Data mining techniques provides with a level of confidence about the predicted solutions in terms of the consistency of prediction and in terms of the frequency of correct predictions. Also it is applied successfully to predict different weather elements like wind speed, rainfall, cloud and temperature. Agricultural sector can benefit from these predictions.

In this work we predicted various weather parameters like temperature, pressure, rainfall, wind speed etc. using both Support Vector Machines and Neural Networks based on the maximum temperature of previous days, referred to as order, which is the optimal length of the span. The optimal value of it is to be fixed by experimentation.

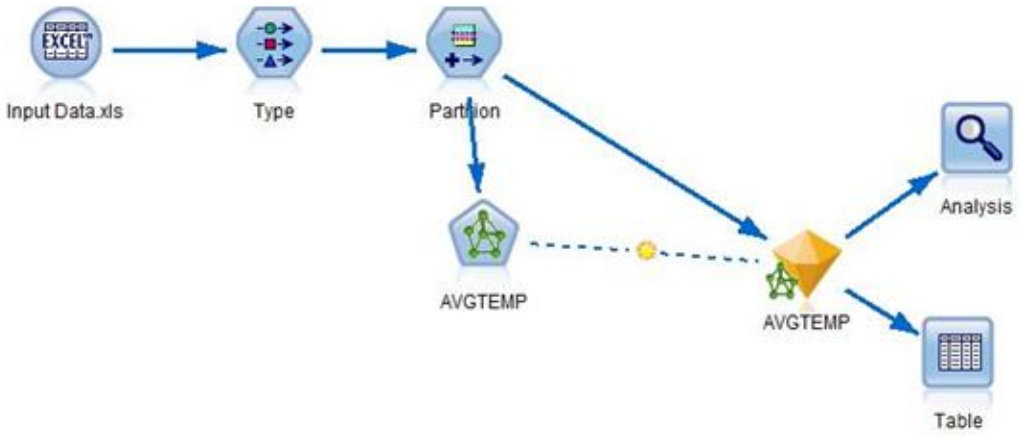

Figure 5.10: Stream depicting the prediction of Average Temperature using Neural Network

Figure 5.10 shows the following

- Read the data using excel source node and attach it to a type node.
- Now partition the data and attach a “Neural Net”/”SVM” modelling node

to the partition node.

- Select the target and the inputs in the modelling node and run it.
- Attach an analysis node and tabulate the results for different possible combinations.

Sample Page 9

7.1 EXPERIMENTAL RESULTS

The accuracy of correctly predicting that a patient will die is greater than the accuracy of correctly predicting that the patient will live. The classifier conservatively predicts that the healthy patient may be prone to the HCV Infection based on the reported symptoms which will help in early diagnosis and reduce the possible risks [13].

Table 3: Performance Measures for the proposed algorithm

Accuracy Measure	Value
Specificity	0.88
Recall	0.65
Precision	0.92
F-Measure	0.77
Accuracy	73.6%

The proposed algorithm returned an accuracy of 73.6% with performance measures: specificity, recall, precision and f-measure with values 0.88, 0.65, 0.92 and 0.77 respectively. The confusion matrix for the obtained results is given in Table 2 and the Performance measures are shown in Table 3.

Sample Page 10

References

A. Journals/Articles

1. Tahseen A. Jilani , Muhammad Shoaib , Rehan Rasheed, Bilal Ur Rehman, "A Comparative Study of Data Mining Techniques for HCV Patients' Data", *Journal of Applied Environmental Biological Sciences,* **Vol. 4, No. 9S, pp. 217-223, 2014.**

2. W. Diffie and M.E. Hellman, "New Directions in Cryptography", *IEEE Trans. Information Theory*, **Vol. 22, pp. 644–654, 1976**.

B. Thesis

3. Chandramouli, K. V. V., *An Exploratory Study of Subcontracting Relationships and the Growth of Small and Medium Enterprises in India in the Automotive Industry*, **Ph.D. Thesis, IIT Kharagpur, India, (2011).**

C. Books

4. Kamber, Micheline, and Jian Pei, *Data Mining*, **2nd Edition, Morgan Kaufmann, 2006.**

D. Conference Proceedings

5. Sireesha Rodda , Uma Shankar Rao Erothi, "Class Imbalance Problem in the Network Intrusion Detection", *In Proceedings of International Conference on Electrical, Electronics & Optimization Techniques*, **pp. 2685-2688, (2016).**

E. Patents

6. Oenning, V. and Clark, I. S. R., **U. S. Patent No. 4988386 (1991)**.

F. e-websites / downloads

7. National Centre for Biotechnology Information, http://www.ncbi.nlm.nih.gov/