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COVER / TITLE PAGE :

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T I T L E

The Thesis report submitted in partial fulfillment
of the requirements for the award of
MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & TECHNOLOGY /
INFORMATION TECHNOLOGY

By

STUDENT NAME

UNIVERSITY
EMBLEM

DEPARTMENT OF COMPUTER SCIENCE AND SYSTEMS ENGINEERING
COLLEGE OF ENGINEERING
ANDHRA UNIVERSITY
VISAKHAPATNAM

CERTIFICATE

This is to certify that it is a bonafide work done by
Mr./Ms/Mrs. _____ during the year 200 - 200 in partial
fulfillment of the requirements for the award of degree of Master of Technology in Computer
Science and Technology Computer Science and Technology / Information Technology in the
Department of Computer Science and Systems Engineering, Andhra University, Visakhapatnam.
This work is not submitted to any University for the award of any Degree / Diploma.

Internal Guide
Name, Designation and Signature

External Guide (if any)
Name, Designation and Signature

HEAD OF THE DEPARTMENT

Dt

From :

HEAD OF THE DEPARTMENT

NOTICE

All the final semester M.Tech.(CST & IT) (Day Time and Self Finance Students) are informed to submit the guide acceptance letter individually with a copy to the guide and Head of the Department for record on or before _____

- | | |
|--|-------|
| 1. M.Tech. Commencement of Project | _____ |
| 2. Last Day of submission of manuscript to the guide | _____ |
| 3. Last Day of Submission of Projects to the Dept. | _____ |

ATTENDANCE :

Every student of regular and self finance batches must sign in the attendance register in the department office in case they are doing the project in the Department.

In case of stipendary students doing the project at other than department, their stipend form should support and attendance certificate separately for each month which should reach the office of department before 15th of next month for the previous month's stipend.

In case of non-stipendary students, doing projects at other than department, they should submit the monthly attendance reports from the organization before 15th of next month for the previous month. Without minimum attendance, no student is allowed to appear in Project Viva Examination.

HEAD OF THE DEPARTMENT

M.TECH. PROJECT GUIDE LINES

The purpose of this note is to describe how to organize the written Dissertation submitted as partial fulfillment of your M.Tech. Degree.

The distinguishing mark of a dissertation is an original contribution to knowledge. The dissertation is a formal document whose sole purpose is to prove that you have made an original contribution to knowledge. Failure to prove that you have made such a contribution generally leads to failure.

To this end, your dissertation must show two important things :

1. You have identified a worthwhile problem, which has not been previously solved.
2. You have answered the question.

Your contribution to knowledge generally lies in your solution or answer.

The sole purpose of the dissertation is to prove that you have made an original and useful contribution to knowledge. The examiners need answers to the following questions:

- What is this student's research question?
- Is it a good question? (has it been answered before> is it a useful question to work on?)
- Did the student convince me that the question was adequately answered?
- Has the student made an adequate contribution to knowledge?

To prove the originality and value of your contribution, you must present a thorough review of the existing literature on the subject, and on closely related subjects. Then, by making direct reference to your literature review, you must demonstrate that your question.

- (a) Has not been previously answered, and
- (b) Is worth answering

Describing how you answered the question is usually easier to write about, since you have been intimately involved in the details over the course of your studies.

A Generic Dissertation Skeleton

1. INTRODUCTION

This is a general introduction to what the dissertation is all about-it is not just a description of the contents of each section. Briefly summarize the question (You will be stating the question in detail later), some of the reasons why it is a worthwhile question, and perhaps give an overview of your main results. This is a birds-eye view of the answers to the main questions answered in the dissertation (see above).

2. BACKGROUND INFORMATION

A brief section giving background information may be necessary, especially if your work spans two or more traditional fields. That means your readers may not have any experience with some of the material needed to follow your dissertation, so you need to give it to them. A different title than that given above is usually better; e.g., “A Brief Review of Frammis Algebra”.

3. REVIEW OF THE STATE OF THE ART

Here you review the state of the art relevant to your dissertation. Again, a different title is probably appropriate; e.g., “State of the Art in Zylon Algorithm”. The idea is to present (critical analysis a little bit later) the major ideas in the state of the art right up to, but not including, your own personal brilliant ideas.

You organize this section by idea, and not by author or by publication. For example if there have been three important main approaches to Zylon Algorithms to date, you might organize subsections around these three approaches, if necessary:

- 3.1. Interactive Approximate of Zylons
- 3.2. Statistical Weighting of Zylons
- 3.3. Graph-theoretic Approaches to Zylon Manipulation

4. PROBLEM STATEMENT

Engineering dissertation tend to refer to a “problem to be solved.

- A concise statement of the question that you dissertation tackles
- Justification, by direct reference to section3, that you question is previously unanswered.
- Discussion of why it is worthwhile to answer this question.

Item 2 above is where you analyze information which you presented in Section 3. For example, may be your problem is to “develop a Zylon algorithm capable of handling very large scale problems in reasonable time” (you would further describe what you mean by “large scale” and “reasonable time” in the problem statement). Now in your analysis of the art ou would show how each class of current approaches fails (i.e. can handle only small problems, o taks too much time). In the last part of this section you would explain why having a large scale fast Xylon algorithm is useful; e.g., by describing applications where it can be used.

5. DESCRIBING HOW YOU SOLVED THE PROBLEM

This part of the dissertation is much more free-form. It may have one or several sections and subsections. But it all has only one purpose: to convince the examiners that you solved the problem that you set for yourself in Section 4. So show what you did that is relevant to solving the problem: if there were blind all eye and dead ends, do not include these.

6. CONCLUSIONS

You generally cover three things in the Conclusions section, and each of these usually merits a separate subsection:

- a) Conclusions
- b) Summary of Contributions
- c) Future Research

7. REFERENCES

The list of references is closely tied to the review of the state of the art given in section 3. Most examiners scan your list of references looking for the important works in the field, so make sure they are listed and referred to in section 3. Truth be known, most examiners also look for their own publications if they are in the topic area of the dissertation, so list these too. Besides, reading your examiner's papers usually gives you a clue as to the type of questions they are likely to ask.

All references given must be referred to in the main body of the dissertation. Note the difference from a Bibliography, which may include works that are not directly referenced in the dissertation. Organize the list of references either alphabetically by author surname (preferred), or by order of citation in the dissertation.

8. APPENDICES

What goes in the appendices? Any material which impedes the smooth development of your presentation, but which is important to justify the results of a dissertation. Generally it is material that is of too nitty-gritty a level of detail for inclusion in the main body of the dissertation, but which should be available for perusal by the examiners to convince them sufficiently. Examples include program listings, immense tables of data, lengthy mathematical proofs or derivations, etc.,

A NOTE ON COMPUTER PROGRAMS AND OTHER PROTOTYPE

The purpose of your dissertation is to clearly document an original contribution to knowledge. You may develop computer programs, prototypes, or other tools as a means of providing your points, but remember, the dissertation is not about the tool, it is about the contribution to knowledge. Tools such as computer programs are fine and useful products, but you can't get an advanced degree just for the tool. You must use the tool to demonstrate that you have made an original contribution to knowledge; e.g., through its use, or ideas it embodies.

HOW TO WRITE AN ABSTRACT

ABSTRACT

Because on-line search databases typically contain only abstracts, it is vital to write a complete but concise description of your work to notice potential readers into obtaining a copy of the full paper. This article describes how to write a good computer architecture abstract for both conference and journal papers. Writers should follow a checklist consisting of motivation, problem statement, approach, results, and conclusions. Following this checklist should increase the chance of people taking the time to obtain and read your complete paper.

INTRODUCTION

Now that the use of on-line publication databases is prevalent, writing a really good abstract has become even more important than it was a decade ago. Abstracts have always served the function of “selling” your work. But now, instead of merely convincing the reader to keep reading the rest of the attached paper, an abstract must convince the reader to leave the comfort of an office and go hunt down a copy- of the article from a library (or worse , obtain one after a long wait through inter-library loan). In a business context , an “executive summary” is often the only piece of a report read by the people who matter ; and it should be similar in contest if not tone to a journal paper abstract.

CHECKLIST : PARTS OF AN ABSTRACT

Despite the fact that an abstract is quite brief , it must do almost as much work as the multipage paper that follows it. In a computer architecture paper, this means that it should in most cases include the following sections. Each section is typically a single sentence , although there is room for creativity. In particular , the parts may be merged or spread among a set of sentences. Use the following as a checklist for your next abstract.

- MOTIVATION

Why do we care about the problem and the results? If the problem is not obviously “interesting” it might be better to put motivation first; but if your work is incremental progress on a problem that is widely recognized as important, then it is probably better to put the problem statement first to indicate which piece of the larger problem you are breaking off to work on. This section should include the importance of your work, the difficulty of the area , and the impact it might have if successful.

- PROBLEM STATEMENT

What problem are you trying to solve ? What is the scope of your work (a, generalized approach , or for a specific situation)? Be careful not to use too much jargon. In some cases it is appropriate to put the problem statement before the motivation, but usually this only works if most readers already understand why the problem is important.

- RESULTS

What’s the answer? Specifically , most good computer architecture papers conclude that something is so many percent faster , cheaper, smaller, or otherwise better than something else. Put the result there, in numbers. Avoid vague, hand-waving results such as “very”, “small”, or “significant” . If you must be vague, you are only given license to do so when you can talk about orders-of-magnitude improvement . There is a tension here in that you should not provide numbers that can be easily misinterpreted, but on the other hand you do not have room for all the caveats.

- CONCLUSIONS

What are the implications of your answer? Is it going to change the world (unlikely), be a significant “win”, be a nice hack , or simply serve as a road sign indicating that this path is a waste of time (all of the previous results are useful). Are , your results general, potentially generalizable, or specific to a particular case?

OTHER CONSIDERATIONS

An abstract must be a fully self-contained, capsule description of the paper. It can't assume (or attempt to provoke) the reader into flipping through looking for an explanation of what is meant by some vague statement. It must make sense all by itself. Some points to consider include:

* Meet the word count limitation. If your abstract runs too long, either it will be rejected or someone will take a chainsaw to it to get it down to size. Your purposes will be better served by doing the difficult task of cutting yourself, rather than leaving it to someone else who might be more interested in meeting size restrictions than in representing your efforts in the best possible manner. An abstract word limit of 150 to 200 words is common.

- Any major restrictions or limitations on the results should be stated, if only by using "weasel-words" such as "might", "could", "may" and "seem".
- Think of a half-dozen search phrases and keywords that people looking for your work might use. Be sure that those exact phrases appear in your abstract, so that they will turn up at the top of a search result listing.
- Usually the context of a paper is set by the publication it appears in (for example, IEEE computer magazines articles are generally about computer technology). But, if your paper appears in a somewhat un-traditional venue, be sure to include in the problem statement the domain or topic area that it is really applicable to.
- Some publications request "keywords". These have two purposes. They are used to facilitate keyword index searches. Which are greatly reduced in importance now that on-line abstract text searching is commonly used. However, they are also used to assign papers to review committees or editors, which can be extremely important to your fate. So make sure that the keyword's you pick make assigning your paper to a review category obvious (for example, if there is a list of conference topics, use your chosen topic area as one of the keyword tuples).

CONCLUSION

Writing an efficient abstract is hard work, but will repay you with increased impact on the world by enticing people to read your publications. Make sure that all the components of a good abstract are included in the one you write.

FURTHER READING

Mchaelson, Herbert, How to write & publish Engineering Papers and Reports, Oryx Press, 1990.

Chapter 6 discusses abstracts.

Cremmins, Edward, The art of abstracting 2nd Edition, info Resources Press, April 1996. This is an entire book about abstracting, written primarily for professional abstracts.

FORMAT OF M.TECH. DISSERTATION

The dissertation should be in the following format. Otherwise , the submission is rejected.

- Cover / Title Page
- 1st Page=Cover Page
- Certificate(Dept.)
- Submit to the H.O.D
- Acknowledgements
- Abstract
- Table of Contents with page numbers
- Rest of the Dissertation : follow the guidelines given
- References

REFERENCES EXAMPLE:

1. Dias, F.J.O. , “Truth-table verification of an iterative logic array, ” IEEE Tans. On Computers, Vol. C-25, PP 605-613 , June 1976.
2. “Signature analysis, “ Hewiatt-Packard Journal , Vol. 28, No. 9, May 1977.
(1) (2) are to shown in text.

- Bibliography

BIBLIOGRAPHY EXAMPLE:

1. (Author) (Text Book) (Publisher), Year

- Appendix

PAGE FORMAT:	Paper Size	.....	A4
	Left Margin	.....	1 ½”
	Right Margin	.....	1”
	Top Margin	.....	1”
	Bottom Margin	.....	1”
	Line Space	.....	1 1/2
	Font-Times New Roman		12
	Page Numbers		at the Bottom Centre
			3 Hard Bound copies are to be submitted

Students must have regular interaction with the project guide. Progress is to be submitted through guide every two months to the Department. Project submission is not allowed for those students who fail to give progress report ON TIME (every two months)

Starting Day of Instruction	4/4 M.Tech.	} {	
Last Day of Instruction	4/4 M.Tech.	} {	As specified
Last Day of M.Tech. Project Submission		} {	by H.O.D.
Commencement of M.Tech. Project Examination		} {	

NOTE: The internal guide must be available during Viva-Voce Examination of the concerned student(s).

PRESENTATION MATERIAL FOR PROJECT VIVA:

Each student has to attend viva with not less than 10 and not more than 15 OHP transparencies covering major key points of the work. Results of the Project work should be

demonstration on a PC. Soft copy of the code must be kept in the folder attached to the last cover page. Projects without code cannot be accepted.

CERTIFICATE FOR STUDENTS WHO HAD DONE PROJECT IN THE
INDUSTRY / ORGANISATION

This is to certify that it is a bonafied record of the Dissertation work entitled “_____” done by STUDENT NAME , a student of M.Tech. in the Department of Computer Science and Engineering , Andhra University, Visakhapatnam during the period 200 - 200 in partial fulfillment of the requirements for the Award of Degree of M.Tech. in COMPUTER SCIENCE AND TECHNOLOGY. This work is not submitted to any University for the award of any Degree / Diploma. This work is carried out in (NAME OF THE ORGANISATION) with complete address.

INTERNAL GUIDE

HEAD OF THE DEPARTMENT

CERTIFICATE FROM INDUSTRY

To

Date:

Head of the Department
Dept. of CS & SE
College of Engg.,
Andhra University
VISAKHAPATNAM.

CERTIFICATE OF PROJECT COMPLETION

This is to certify that _____
Has completed the project in our organization as per the particulars given below.

PERIOD :

PROJECT TITLE :

SOFTWARE TOOLS USED :

SIGNATURE AND STAMP

INDUSTRY / ORGANISATION
OFFICE SEAL