Department of Computer, Information Sciences and Mathematics
School of Arts and Sciences
University of San Carlos

Thesis Proposal Guidelines and Document Format

Prepared by:

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Thesis Professor

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Section 1. What is Thesis?

THESIS

- Thesis is required for BSCS. It functions as terminal project requirements that would not only demonstrate a student's comprehensive knowledge of the area of study and research methods used but also allow them to apply the concepts and methods to a specific problem in their area of specialization.

- A thesis builds and tests the skills and the knowledge acquired during the education and is an essential part of the training towards becoming a professional.

- Content must be focused on the concepts and theories of computing and it should be in the form of scientific work that may be presented in a public forum.

- Software development projects / special problems

- It may include:

  - A solution
  - An appropriate or partial solution
  - A scientific investigation, or
  - The development of results leading to the solution of the problem

- These solutions, investigations, or results must be anchored on Computer Science principles.

- A thesis that is heavily software systems development should clearly demonstrate a software development that is algorithm-based and founded on Computer Science principles.

Research in Computing

- Systematic method of problem solving

- Use of scientific method

  - Collecting data
  - Formulating a hypothesis or proposition
  - Testing the hypothesis
  - Interpreting results
  - Stating conclusions that can be later be evaluated independently by others.

Section 2. Scope of the Theses

◎ The Thesis should integrate the different courses, knowledge, and competencies learned in the curriculum. Students are encourages to produce innovative results, generate new knowledge or theories, or explore new frontiers of knowledge or application areas.

◎ Theses involving the development of the software systems should involve algorithm-based research and development founded on Computer Science principles. This should be reflected in the final report.

◎ The thesis **adviser should** determine the appropriate complexity level of the specific problem being addressed and the proposed solution, considering the duration of the project, the composition of the team, and the resources available.

Section 3. Suggested Areas for Theses

◉ Current Computer Science Topics
   • Software Development and Theory
   • Mobile Computing Systems
   • Software Extensions or Plug-ins
   • Expert Systems and Decision Support Systems
   • Systems Software (software tools/utilities, interpreters, simulators, compilers, security aspects)
   • Intelligent Systems
   • Game Development
   • Computer Vision
   • Image / Signal Processing
   • Natural Language Processing
   • Pattern Recognition and Data Mining
   • Bioinformatics
   • Graphics Applications
   • Cloud Computing
   • Parallel Computing
   • Embedded Systems
   • Emerging Technologies

◉ Foundations of Computer Science
   • Automata and Formal Languages
   • Data Structures and Algorithm Design and Analysis
   • Web Semantics
   • Coding Theory
   • Programming Languages
   • Visualization Systems

- Computer and Architecture
- Modelling and Simulation

O **Human Computer Interaction**
- Usability
- Affective Computing
- Emphatic Computing

O **Other Areas**

Section 4. Suggested Themes for Theses

O The following are Research Themes or Agenda of University of San Carlos:

- Food
- Health
- Water
- Waste
- Energy
- Disaster and Risk Management
- Governance
- Education
- Business
- Human Resources

O How can Computer Science be able to contribute to these agenda?

Section 5. Thesis Duration

O Students are given ample time to finish their thesis.

O Students will enrol two semesters to complete their thesis

- CS 3201 CS Thesis 1 (3 units)
- CS 4101 CS Thesis 2 (3 units)

O A professor is assign to handle the course and coordinate with Students and Advisers.

Section 6. Composition of Thesis Groups

- Students should preferably work in teams of two (2) members depending on the complexity of the project. The adviser should be able to determine whether the team can complete the project on time.

- Multidisciplinary teams are also encouraged, provided that team members prepare separate documentations per program

Section 7. Adviser Composition

Panel Composition

- The Project is prepared under the guidance of an adviser and presented and accepted by a Panel composed of at least 3 members: Chair of the Panel and 2 members of the Panel.

- Chair
  - policy same as Adviser's qualification, preferably domain expert
- Panel Member 1
  - Faculty Member with undergraduate or graduate degree ; Full time or Part time Faculty)
- Panel Member 2
  - Faculty Member with Industry Experience or Someone from the Industry

Adviser/Panel Composition

- The adviser must have at least a Master's Degree.

- The adviser must have completed a computing project successfully beyond bachelor's degree project or must have experienced and completed a Thesis.

- An adviser must have an experience in:
  - design and create algorithmically software
  - develop new and effective algorithms for solving computing problems.
  - design and develop computing solutions using a system-level perspective

- As much as possible, the adviser should be a full-time faculty member of the HEI. Otherwise a full-time faculty co-adviser is required.

- Advisers and Panel Members should have a degree in a Computing or Allied programs, or must be a domain experts in the area of study.

- At least one of the panel members must have a master's degree in Computing (preferably in the same field as the thesis or project) or allied program.

- For IT at least one of the panel members should preferably have an industry experience.

- The adviser must be able to guide the students throughout the whole project life cycle, including the thesis/capstone project defense and possible project deployment.

Adviser's Role

- Must guide the advisee to conceptualize the Research or Capstone Topic.

- Must be involved in the accomplishment of completion of (Chapter 1-4 of Proposal Document) and (Chapter 1-6 of Final Document).

- Must be able to guide the students throughout the whole project life cycle, including the thesis/capstone project defense and possible project deployment.

- Must guide their advisees to secure the following (if applicable)
  - Ethics Clearance Form
  - Consent Forms

- Responsible to submit Student's work in Conference Proceedings or Journal.
- Guide the student if they intend to publish (Conference Proceedings or Journal)
- Publication document should be reviewed and approved by the adviser before submission.

Section 8. Presentation of the Thesis and Publication

- Thesis must be presented in a public forum.
- This forum may be an international, national, regional or school-based conference, meeting, or seminar that is announced and open to interested parties.
- A separate from the presentation before the Panel.
- There is an annual culminating event held at the end of the School Year: Best Thesis Awarding Ceremony with Panel Members from the Industry
- Criteria for Best Thesis: (1) Relevance to the Theme – 25%; (2) Originality – 30%; Publication – 20% and Impact to Community (CES) – 25%

Section 9. Thesis Proposal Guidelines

- **Paper and Font.** Use 8.5 X 11. Use one side of the page only. Use Arial for font style and font size 12-point.

- **Margins.** Left 1.5 inches; top, bottom, and right, 1 inch.

- **Spacing.** Use 1.5 spacing for the text. Use single space for table, figure captions and each entry of the bibliography section.

- **Page Numbering.** Preliminary pages of the thesis proposal include Title Page, ABSTRACT, TABLE OF CONTENTS, LIST OF FIGURES, LIST OF TABLES. Except for Title Page, pages are to be numbered in Roman numerals **ii, iii, iv..etc.** pages of the text itself (CHAPTER 1) should be numbers consecutively throughout in Arabic numbers, beginning with page number 1 on the first page of the first chapter or INTRODUCTION. Page numbers should be right aligned and place at the bottom of the page. Only the number should appear.

- **Figures and Illustrations.** Figures, tables, graphs, etc., should be positioned and labeled appropriately. Figure # should be placed bottom center of the figure. Table # should be placed upper left of the table.
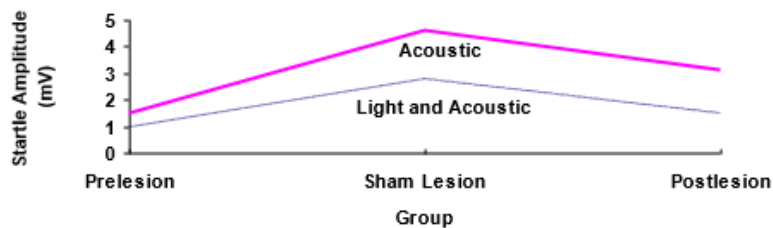
  Figures:
    - A figure is any type of illustration other than a table (chart, graph, photograph, or drawing).
    - Use figures to complement information in text or to simplify text.
    - Number figures in the order they are first mentioned in text. Do not write "the figure above" or "the figure below."
    - Ensure that figures are simple, clear and consistent in presentation and vocabulary.
    - Ensure data are plotted accurately and the grid scale is proportioned.
    - Place labels close to the identified item.
    - Axis labels on graphs should be parallel to their axes.
    - Captions include the figure title and a brief, but descriptive, explanation of the figure.
    - Use 1.5 the caption and place it below the figure.

o   The figure legend should be positioned within the borders of the figure.

Example

The following figure and note are each adapted from the Publication Manual of the American Psychological Association (APA, 2001, pp. 182-183).

Figure 1. Mean amplitude startle response for prelesion, sham lesion, and postlesion groups in acoustic and light-and-acoustic test conditions.

Tables:

o   Use tables for the purpose of simplifying text. A table with 2 or fewer columns and rows should be presented in text format instead of a table.

o   Number tables in the order they are first mentioned in text. Do not write "the table above" or "the table below."

o   Be consistent in the formatting and vocabulary of all tables when writing a paper.

o   Apply 1.5 spacing of the entire table

o   Ensure that your table title is brief but explanatory.

o   Italicize the table title. Do not italicize the table number

o   Standard abbreviations and symbols, such as % or no. may be used in headings without further explanation.

o   Ensure each column has a heading

o   Capitalize only the first letter of the first word of all headings. If a word is a proper noun, however, be sure to capitalize the first letter anyway.

Example

See Table 1 as a guide to the formatting of a table. This table is an example from the Publication Manual of the American Psychological Association (APA, 2001, p. 149). The fictitious general note has been included as an example.
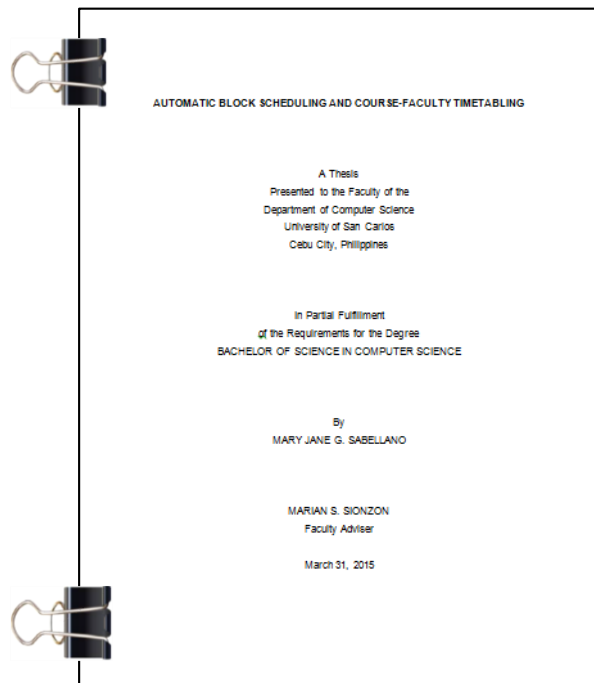
Table 1

Error Rates of Older and Younger Groups

Level of difficulty	Mean error rate		Standard deviation		Sample size	
	Younger	Older	Younger	Older	Younger	Older
Low	.05	.14	.08	.15	12	18
Moderate	.05	.17	.07	.15	15	12
High	.11	.26	.10	.21	16	14

- Submit 3 copies of your Thesis Proposal Document with Endorsement from Adviser a week before Thesis Proposal Defense to the thesis proposal committee for face to face defense. Submit 1 softcopy of your Thesis Proposal Document with Endorsement from Adviser a week before Thesis Proposal Defense to the thesis proposal committee for online defense. Bind your printed Thesis proposal document using **clear folder** with binder paper clip: (see illustration).

AUTOMATIC BLOCK SCHEDULING AND COURSE-FACULTY TIMETABLING

A Thesis
Presented to the Faculty of the
Department of Computer Science
University of San Carlos
Cebu City, Philippines

In Partial Fulfillment
of the Requirements for the Degree
BACHELOR OF SCIENCE IN COMPUTER SCIENCE

By
MARY JANE G. SABELLANO

MARIAN S. SIONZON
Faculty Adviser

March 31, 2015

Section 10. Thesis Proposal Documentation Format

(Sample Title Page)

MOBILE ATTENDANCE MANAGEMENT SYSTEM USING FACE RECOGNITION

A Thesis Proposal

Presented to the Faculty of the

Department of Computer, Information Sciences and Mathematics

University of San Carlos

In Partial Fulfillment

of the Requirements for the Degree

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

By

CHARLES VAN RYAN S. FLORIDO

JEWEL JOSEF P. SENO

ANGIE M. CENIZA-CANILLO, PhD

Faculty Adviser

June 2018

ABSTRACT

This section of the thesis highlights the findings of the study. From 150 to 200 words of short, direct and complete sentences, the abstract should be informative enough to serve as a substitute for reading the thesis itself. Do not put citations or quotes in this section. Avoid beginning the abstract with "This paper/document/thesis/study/project/…"

The abstract structure consists of the following:

Background: A simple opening sentence or two placing the work in context.

Aims: One or two sentences giving the purpose of the work.

Method(s): One or two sentences explaining what was (or will) be done.

Results: One or two sentences indicating the main findings (or what you hope to accomplish with the project).

Conclusions: One sentence giving the most important consequence of the work – what do the results mean? How will they be used?

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LIST OF FIGURES

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CHAPTER 1
INTRODUCTION

1.1 Rationale of the Study

This section begins discussing the research problem itself. This presents situations that lead to the conceptualization of the study. Convince reader why the problem is important. You may use statistics to add depth and add historical account of recent research literature within the past 5 years. Avoid verbatim quotes except for key definitions. This is a form of plagiarism even with citations!

Discuss key concepts and methods. Discuss the content in your own thoughts in your own words, confirmed by other background information. It is organized to move from general information to specific information. The background must be summarized succinctly, but it should not be itemized. Limit the introduction to studies that relate directly to the present study. End the introduction by explicitly declaring the novelty of your work or your specific contribution. The last sentence is usually a statement of your general objective.

Hint in organization: Start with the big picture about your topic, something that readers will identify in concrete term (non-technical), then limit the problem, gradually focusing on your topic and gently lead the reader to your research problem and justification for choosing it. (Funnel –shape structure).
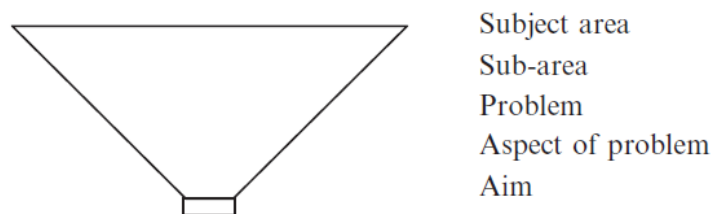
Figure 1. Funnel-shape structure of Introduction chapter

Format of citations and quotations will be based from the APA format. This section must be 1- 2 pages long.

Briefly you have three building blocks to present the overall picture: (1) important concepts and factors (2) motivations behind the aim and (3) the aim.

1.2 Statement of the Problem

This section states what the research intends to do. This section consists of 2 sub sections: General Objective and Specific Objectives.

1.2.1 General Objective

This section is a general statement or project aim written in a short statement in the form of a clear, unambiguous sentence describing the overall goal of the project. It describes the direction or purpose of the research. This general objective is a question or a problem definition within the subject area that the researcher would like to solve.

Example:

Develop a security infrastructure for electronic commerce based on XML

1.2.2 Specific Objectives

The specific objectives are the means on how to achieve the general objective. The specific objectives are usually presented as a numbered list of activities to carry out in order to achieve the general objective. Once you have developed your project aim you can start to develop specific objectives, and later also choose a method for each specific objective. Each objective is a small, achievable and assessable unit. It is formulated in such a way that fulfilling the objectives leads to the overall aim being satisfied.

This consists of clear statements of the intended outcomes, all which can be measured in some way. The SMART (Specific, Measurable, Achievable, Realistic and Time-bound) objectives should break your research proposal into major stages and state an output, which would guide you in planning and negotiating your work with your supervisor.
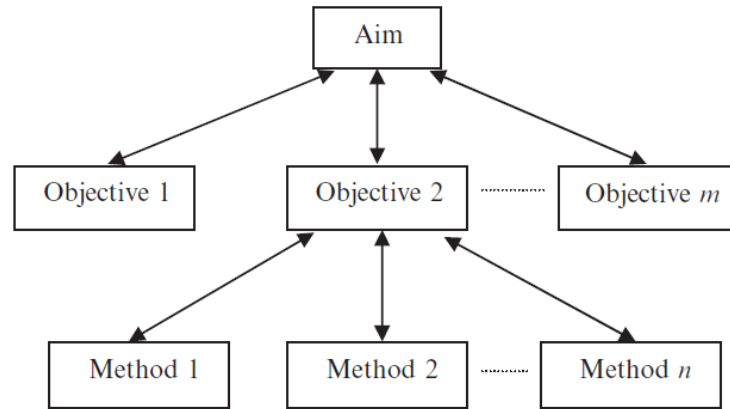
Figure 2. Depicts the relationship between your aim, objectives and methods.

Once you have written down your specific objectives, you can start to identify potential methods for each objective. Think in terms of: how can this objective be achieved or solved? When you have chosen the methods you intend to use, it can be useful to summarize your overall approach. This serves at least two important purposes. First, you will be able to get a bird's eye view of the methods you have chosen and see their relationships. Second, you will be able to present additional details of how you intend to use these methods in your project. Additionally, it will be easier for other people to grasp your approach if you have provided a summary of how you intend to structure your work.

1.3 Significance of the Study

This section presents the importance and contribution of the research to the individuals, groups, institutions and to the discipline. Mention who are to benefit from the research and how each maybe benefited.

1.4 Scope and Limitation

This section discussed the extent of the study and what limitations are there. This section must state the weaknesses and limitation of the study.

CHAPTER 2
REVIEW OF RELATED LITERATURE

This chapter is a review of research works done by others that relate to what you hope to demonstrate with your work. This is also where the literature related to methods that you used in your work should be introduced. This part of your thesis document will form the bulk of your citations.

This chapter is an examination and discussion of the literature and systems in a given area of study. It is a concise overview of what has been studied, argued, and established about a topic, usually organized chronologically or thematically.

It is more than an annotated bibliography or a summary, because you are organizing and presenting your sources in terms of overall relationship to your own study. It evaluates previous and current research in regards to how relevant or useful it is and how it relates to your own research. This chapter must be at least 5 pages long and must at least contain 20-30 author citations.

Suggested Content based from PSITE Undergraduate Research and Capstone Project Manual

- An organizational pattern that combines both summary and synthesis to give new interpretations of old material or combine new with old interpretations;
- A tracing of the intellectual progression of the field, including major debates
- An evaluation of the sources and an advise to the reader on which of the materials cited are the most pertinent or relevant in the thesis or capstone
- A review of related systems contains description of existing systems that are relevant to the proposed thesis.
- Discussion of specific features of other systems that you intend to replicate and improve will help define what is to be expected in your project.

Suggested Format from PSITE Undergraduate Research and Capstone Project Manual

- A logical flow of ideas

- Current and relevant references with consistent, appropriate referencing style

- Proper use of terminology

- An unbiased and comprehensive view of the previous research on the topic

Suggestion in organization: Usually starts in general and gradually progresses into published research most related to your specific research's emphasis. Describe the general themes in the research related to your topic. Any gaps in the published research are noted, particularly if the project addresses the gaps. The literature review moves from what is currently published and known about the topic to what your research is going to add to the topic. Include why the particular research focus is important and how it differs from previous research on the topic.

You may present figures and tables if necessary in this section. Figures must be labeled. Figure labels are placed at the bottom of the figure center aligned. Table labels are placed at the top of the table and left aligned.

For relevant sources refer to Journals in Computer Science or make extensive use of the online sources available in the USC library these include: ACM Digital Library, Academic OneFile, Proquest, Science Direct, EBSCO & Springerlink. For more information on how to use and access this online sources visit Josef Baumgartner Learning Resource Center (JB-LRC) and ask assistance from Ms. Marcie of Serials Library Section.

CHAPTER 3
TECHNICAL BACKGROUND

This section may include a comprehensive discussion of **theorems**, **definitions**, **fundamental algorithms**, **mathematical models**, and/or **formulas** relevant in the study. This chapter should be elaborated as much as possible in layman's terms.

The technical background must be written in narrative form. **Subheadings are recommended** for descriptions that are substantially long. Items are arranged by order of importance or theme Aside from texts, the author may put tables, graphs, illustration, pictures and other relevant information as necessary (PSITE Undergraduate Research and Capstone Project Manual).

CHAPTER 4
DESIGN AND METHODOLOGY

The design is a blueprint of the concept of the proposed research project. It specifies the conceptual structure of what the project proponents will do. It provides an outline of the phases and sub-phases that will help the proponents be guided in their choice of techniques that are most appropriate at each stage of the research project. It will also help the project proponent plan, manage, control and evaluate computing research project.

The methodology is defined as collection of procedures, techniques, tools, and documentation aids which will help the proponents in their effort to solve computing problems. Contents of this chapter include the following section

4.1. Research Environment and Respondents *(if applicable)*

Research environment describes the locale/venue of the research.

Research Respondents define the study population and describes the type and characteristics of the respondents/participants. Describes the sampling technique used in selecting study subjects/participants and identifies possible limitations in the choice of respondents/participants

4.2. Research Instrument or Sources of Data *(if applicable)*

Describes the research instrument(s)/tools for gathering data and identify whether they are standardized or researcher-made. The description of the instrument(s) should describe the purpose of the instrument (what it is intend to measure), and available validity and reliability coefficients. Describes the content and preparation of each instrument. Describes other sources of data (e.g. records, documents). Identifies limitations of the research instruments and/or sources of data.

4.3 Research Procedure *(if applicable)*

This section consists of two subsections: Gathering of Data and Treatment of Data.

4.3.1 Gathering of Data

This section describes in detail the phases of data gathering employing the research tools described earlier. The description of procedures should describe in detail all steps which were executed in conducting the study. Consider the following in composing this section:

1. Did you use Qualitative or Quantitative data collection?
2. Did you conduct interview? survey or questionnaire? document review?
3. Respondents were interviewed several times?
4. What other source of relevant documents do you have? name it..

4.3.2 Treatment of Data

This part explains the procedures for processing and analysis of data. Describe the steps necessary in processing your data and the statistical procedures to be used to answer each specific sub-problem of the study. Include a justification of the statistical procedures used and state your level of significance. For qualitative data, include the methods on how data will be presented and analyzed. Consider the following in composing this section:

1. What tool will you use to analyze the data:
   - Consider using Statistical Softwares like IBM SPSS Statistics 19 (analyze using descriptive statistics) see tutorials available
2. How will you present the result of the analysis:
   - Presentation of data : tabular form, graphs or charts
   - SPSS can auto generate this

4.4. Concept

It is narrative description of the design to achieve your project objectives. Most of the concept is illustrated in a graphical diagram to visually present the structure of the concept of the research or project (conceptual framework)

4.5. Analysis and Design

It is either Structured or Object-oriented approach (introduce UML, ER Diagrams if possible).

4.6. Development Model

It may include any of the following models: Conventional waterfall-type, Incremental, Throw-away prototyping, Evolutionary prototyping.

4.7. Development Approaches

It may include either Top down or Bottom-up approach of development.

4.8. Software Development Tools

It should contain the discussion about the programming language tools to be used specifically on: Front and Back-end; Reuse or not; Open vs. licensed software; Criteria of selecting it such as maintainability, support, HCI capability, database connectivity, simplicity, learning.

4.9. Project Management

This section of the document includes subsections on Schedule and Timeline, Responsibilities and Budget and Cost Management.

4.9.1 Schedule and Timeline

It may contain Gantt Chart, Activity Graph, Critical Path Analysis and other scheduling techniques that will list the activities to be done in order to achieve the objective. Usually it includes the phases an its sub-phases of the systems development life cycle.

4.9.2 Responsibilities

It should contain the assignment modules and activities to be done by each team member

4.9.3 Budget and Cost Management

It should contain a detailed budget proposal and how each cost is to be managed effectively in the conduct of research or study.

4.10 Verification, Validation and Testing

It should include the plan of activities to: verify if you are developing the system right, validate if you are developing the right system, and test the system if it works correctly without any bugs or errors. Most importantly, use of any quantitative and qualitative measures should be planned in order to achieve the research projects specific objectives

The items 4.4-4.10 are suggested content from PSITE Undergraduate Research and Capstone Project Manual

Computing Science researchers use several methodologies to tackle questions within the discipline. The idea is not to classify researchers or projects in each of these methodologies or to be exhaustive. Tasks performed by a single researcher fall within different methodologies. Even the activities required to tackle a single research question may include several of these methodologies.

Scientific Methods of Computer Science

- **Formal Method** mostly used to prove facts about algorithms and system. Develop mathematical techniques to address questions. Discovery of more efficient algorithms in many areas including combinatorial problems, computational geometry, cryptography, parallel and distributed computing. They also answer fundamental questions about computability and complexity.
- **Experimental Method** broadly used in CS to evaluate new solutions for problems. Experimental evaluation is often divided into two phases. In an exploratory phase the researcher is taking measurements that will help identify what are the questions that should be asked about the system under evaluation. Then an evaluation phase will attempt to

answer these questions. A well-designed experiment will start with a list of the questions that the experiment is expected to answer.

- **Build Method** consists of building an artifact either a physical artifact or a software system to demonstrate that it is possible. Design the software system, Reuse components, Choose an adequate programming language, Consider testing all the time.

- **Process Method** used to understand the processes used to accomplish tasks in Computing Science. This methodology is mostly used in the areas of Software Engineering and Man-Machine Interface which deal with the way humans build and use computer systems. The study of processes may also be used to understand cognition in the field of Articial Intelligence.

- **Model Method** is centered on defining an abstract model for a real system.

  This model will be much less complex than the system that it models, and therefore will allow the researcher to better understand the system and to use the model to perform experiments that could not be performed in the system itself because of cost or accessibility. The model methodology is often used in combination with the other four methodologies.

BIBLIOGRAPHY

Only sources that were used or cited in the research work are included at least containing 20-30 author citations for undergraduate thesis (Masters may contain at least 50, PhD at least 100). Bibliography section of the document will use American Psychological Association (APA) style format. Entries in the bibliography listing must be sorted alphabetically by categories. The following are the suggested categories.

Book

Journal Article

Conference Proceedings Article

Web Article

Interview

APPENDICES

Appendices are blocks of relevant data and information presented at the end of the documentation. An appendix section gives the readers additional explanations on topics or dicussions. Always provide at least one paragraph to introduce the material being provided in each of the appendix chapter.

Plural (appendices) singular (appendix)

If two or more appendices are included in a proposal, they should be designated Appendix A, Appendix B, etc.

List of appendices applicable during proposal stage

- Transmittal Letter
- Interview Guide
- Questionnaire
- Software Requirements Specification (SRS) *(applicable for software development based thesis)*
  - For this thesis proposal document, the SRS will serve as a contract between the proponent(s) and research committee. This part of the document will describe what the software will do (functional) as well as what it is not expected to do (non-functional requirements). This portion of the document discusses in detailed manner the minimum requirements that may not be possibly covered in the Scope and Limitation section of Chapter 1.

APPENDIX A

TRANSMITAL LETTER

January 20, 2021

Christian V. Maderazo, M.Eng.
Chair, Department of Computer, Information Sciences and Mathematics
University of San Carlos

Dear Sir Maderazo,

Greetings!

May I request from your office the permission to gather information from Department of Computer and Information Sciences for our research study entitled "MOBILE ATTENDANCE MANAGEMENT SYSTEM USING FACE RECOGNITION".

The above research study is a requirement for the completion of the degree in Bachelor of Science in Computer Science (BSCS) in the University of San Carlos. We believe that the result of our study would be useful and helpful in the department.

Thank you very much. We are looking for your positive response.

Respectfully yours,

Charles Van Ryan S. Florido

Jewel Josef P. Seno
BSCS Students, University of San Carlos

Endorsed by:

Angie M. Ceniza-Canillo, PhD
Thesis Adviser

Approved by:

Christian V. Maderazo, M.Eng.
Chair, Department of Computer, Information Sciences and Mathematics

APPENDIX B

INTERVIEW GUIDE

APPENDIX C

QUESTIONNAIRE

CURRICULUM VITAE

A curriculum vitae (CV) provides an overview of a person's experience and other qualifications.

PHOTO

CONTACT INFORMATION

Name:

Address:

Telephone:

Cell Phone:

Email:

PERSONAL INFORMATION

Birthday:

Religion:

Civil Status:

EDUCATION

University of San Carlos

Bachelor of Science in Computer Science

Tertiary Level (year started – present)

University of San Carlos

Secondary Level (year started – year ended)

University of San Carlos

Primary Level (year started – year ended)

TECHNICAL SKILLS

WORK EXPERIENCE

TRAININGS

Section 11. Intellectual Property Rights

- All Thesis and Projects must not infringe on existing IP. All prior works, including open source, open content, and creative commons content, shall be properly cited.

- Copyright and other Intellectual Property Rights arising from the Thesis or Capstone Projects shall be bound by the IP Policies of the University of San Carlos approved as of April 2013.

- The major categories of IPR dealt with in the USC IP Policy are (1) copyrights, (2) trademarks, (3) patents, (4) utility models, (5) designs, (6) layout designs (topographies) of integrated circuits and (7) undisclosed information.

Section 12. Ethics Review

- The University of San Carlos Institutional Ethics Review Committee (USC-IERC) provides services to the researchers in the review of the ethical aspects of the research project.

REFERENCES

About Computing Science Research Methodology
penned by Jose Nelson Amaral with significant contributions from Michael Buro,Renee Elio, Jim Hoover, Ioanis Nikolaidis, Mohammad Salavatipour,
Lorna Stewart, and Ken Wong

CHED Memorandum Order No. 25 Series of 2015
Revised Policies, Standards, and Guidelines for Bachelor of Science in Computer Science, Bachelor of Science in Information Systems and Bachelor of Science in Information Technology Programs

Experiences Teaching a Graduate Research Methods Course
Clifford A. Shaffer
Inroads – The SIGCSE Bulletin Volume 38, Number 2, June 2006

Research Methodologies in Computer Science and Information Systems
Mohannad M. Ayash
Alquds Open University
College of Technology & Applied Science

Research / Scientific Methods in Computer Science
Vera Goebel & Thomas Plagemann
Department of Informatics, University of Oslo

PSITE Undergraduate Research and Capstone Project Manual
Authors: Cherry Lyn Sta. Romana, Randy Gamboa, Dave Marcial, Gregg Victor Gabbison, Allan Sioson
ISBN: 978-971-95389-0-5

Thesis Projects
A Guide for Students in Computer Science and Information Systems
Authors: Mikael Berndtsson, Jörgen Hansson, Björn Olsson, Björn Lundell
ISBN: 978-1-84800-008-7

University of San Carlos
Intellectual Property Policy Manual