ANALYSIS ON SOME DATA USING SOME TECHNIQUE

A Dissertation Proposal Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Student A. Name

December 2020

TABLE OF CONTENTS

1 Problem Statement **1**

2 Background **1**

3 Problem Justification **1**

4 Literature Review **1**

5 Methodology **2**

6 Research Schedule **2**

7 References **2**

LIST OF TABLES

LIST OF FIGURES

1 Problem Statement

Logically, the first step in any research is to provide a clear statement of the problem. This step is indispensable in the writing process in that it governs the organization and flow of the thesis/defense. The problem statement should provide a synopsis of the purpose of the study, briefly define and delimit the specific area of the research, and foreshadow the questions to be raised. A problem may be stated in terms of a verbal statement, i.e., "The purpose of this research is to examine..." or "This study aims at ascertaining ..." Problem could also be stated in the form of a question like: "Why are Muslims divided?" or "What are the factors associated w ith the rise of hate crime against Muslims in the West?" This is a citation [1]. These are multiple citations [2–5].

2 Background

The background and history highlights empirical foundations of research. The purpose of a background/history section is to give the reader the relevant facts about the topic and/or research site so that they understand the material or case in the proposal and how it links to the questions posed.

3 Problem Justification

In stating the problem, it is also necessary to specify why it is important and what new insights may be found. What would be its net contribution to the body of knowledge in the field(s), and/or towards solving the problems for humanity at large?

4 Literature Review

A review of relevant literature is of great significance. The literature review helps relate the proposed study to the larger ongoing discourse in the literature about a phenomenon, filling in gaps in the literature and extending earlier studies. The literature review is neither a chronological summary of related works nor a mere catalogue of previous studies published in the field. Literature review is a well-organized critical appreciation of related and relevant literature conceptually integrated within the logic of the proposed investigation. The student should show whether other researchers have studied the same or similar problems before, from what perspectives have these studies been conducted, and whether these researches have been theoretically or empirically adequate.

5 Methodology

A research problem should, where possible, be set within the framework of a theory. A "theory" is a collection of interrelated law-like statements or hypotheses aimed at explaining a phenomenon. Theories suggest hypotheses to be tested. A hypothesis is a conjectural, conditional (if-then) statement linking two or more variables. Hypothesis grows out of theoretical or conceptual frameworks. The theoretical or conceptual framework and the resultant hypotheses will identify and name the important variables to be studied. The student must identify the variables and define the variables or terms conceptually and operationally.

6 Research Schedule

Identify the major tasks involved in your proposed study and place and identify the length of time to complete the tasks and the order in which they will be done.

7 References

[1] H. Anzt, M. Kreutzer, E. Ponce, G. D. Peterson, G. Wellein, and J. Dongarra, "Optimization and performance evaluation of the IDR iterative Krylov solver on GPUs," *International Journal of High Performance Computing Applications*, 2016.

[2] V. García-Negrón, A. Oyedele, E. Ponce, O. Rios, D. Harper, and D. Keffer, "Evaluation of nano- and mesoscale structural features in composite materials through hierarchical decomposition of the radial distribution function," *Journal of Applied Crystallography*, vol. 51, no. 1, pp. 76–86, 2018.

[3] E. Ponce, G. D. Peterson, and B. Rekepalli, "Optimizing genomic sequence searches to next-generation Intel architectures," in *Proceedings of the 7th International Conference on Bioinformatics and Computational Biology (BICoB'15)*, vol. 1, ISCA, March 2015.

[4] A. Gonzalez, O. Rodriguez, O. Mangual, E. Ponce, and X. Velez, "Adaptive embedded digital system for plasma diagnostics," *Journal of Physics: Conference Series*, vol. 511, no. 012086, 2014.

[5] C. Kotas, E. Ponce, H. Williams, and J. Barhen, "Coherent spatio-temporal sensor fusion on a hybrid multicore processor system," in *Proceedings of the 15th International Conference on Information Fusion (FUSION'12)*, pp. 1504–1510, IEEE, July 2012.