**Chapter 3 – Research Methodology**

**3.1 Introduction**

Research methodology explains the method in which the research is conducted. In this chapter the flow of the research will be explained, as well as the justification for the tools to be used. The shortcomings and problems faced will also be explained in this chapter.

**3.2 Research Flow**

The Research flow explains how the research will be done. It will be divided into several phases, each providing insight on how the project will be accomplished.

**3.2.1 Phase 1 – Literature Review**

This phase of the research deals with gathering information on the current methods of maintenance of Cultural and Historical Architectures using past research papers. Knowledge of the two machine learning algorithms, Decision Tree and Support Vector Machines will also be obtained in this phase as well as how they are used to monitor microclimate data, and which would be better suited for the project. Through analyzing previous research papers done, we can gleam important information for the project, finding out the weaknesses and strengths of the machine learning algorithms as well as current methods of preserving Cultural and Historical Architectures.

**3.2.2 Phase 2 –**

**3.3 Justification**

**3.4 Performance Measurement**

**3.5 Chapter Summary**

**Chapter 4 – Research Findings**

**4.1 Introduction**