

1 Methodology

We intend to use observation, interviews, and review literature of the collected data from the various sources about stochastic optimization methods in structural modelling. The data collected will be subjected to analysis in order to ensure consistency in modelling the system. The data collected will be grouped into functional and non-functional requirements. Functional requirements will specify what the system will do while the non-functional requirements will be the overall constraints. Tools such as SPSS are to be used as they are automated and give quick results. The system will be designed by the use of use case diagrams and data flow diagrams that will help to explain how the actors will interact with the system. We intend to use visual studio and C++ to implement and access the performance of stochastic optimization methods in structural modeling in order to produce a prototype basing on the user requirements. The system will be tested to achieve the forth objective using unit testing and system testing. Thereafter the system will be taken to the users for validation to ensure that it operates to their satisfaction.