TITLE OF PROJECT

An Interim Project Report

Submitted by

STUDENT1 [cb.en.u4cse17xxx]
STUDENT2 [cb.en.u4cse17yyy]
STUDENT3 [cb.en.u4cse17zzz]
STUDENT3 [cb.en.u4cse17zyx]

Under the guidance of

Dr. M. Xyz, Ph.D

(Professor, Department of Computer Sciene & Engineering)

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENE & ENGINEERING

AMRITA VISHWA VIDYAPEETHAM

Amrita Nagar PO, Coimbatore - 641 112, Tamilnadu

Review #1 – September 2020

ABSTRACT

Type your abstract here.
Abstract should be one page synopsis of the project report typed double line spacing. Just type in your abstract here.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

LIST OF SYMBOLS

α, β	Damping constants
θ	Angle of twist, rad
ω	Angular velocity, rad/s
b	Width of the beam, m
h	Height of the beam, m
$\{f(t)\}$	force vector
$[K^e]$	Element stiffness matrix
$[M^e]$	Element mass matrix
$\{q(t)\}$	Displacement vector
$\{\dot{q}(t)\}$	Velocity vector
$\{\ddot{q}(t)\}$	Acceleration vector

Chapter 1

INTRODUCTION

Write your introduction to your project domain and motivation. Replace the sampe text with yours.

1.1 Problem Definition

Define your problem here **SI!** (**SI!**) is typically an inverse process whereby structural parameters such as stiffness, damping properties are identified from input excitation and output responses.

Generally, Engineering problems can be classified into forward and inverse problems (**?**). In forward problems, (**?**)the system output responses are calculated from the known system properties and input responses as shown in Figure **??** whereas in inverse problems, the system parameters are identified based on the input and output responses of the system which is shown in Figure **??**. For a structure, the input excitation is

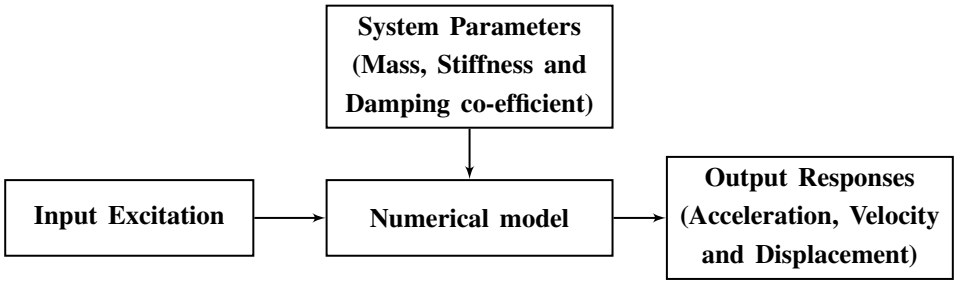

Figure 1.1: Forward problem

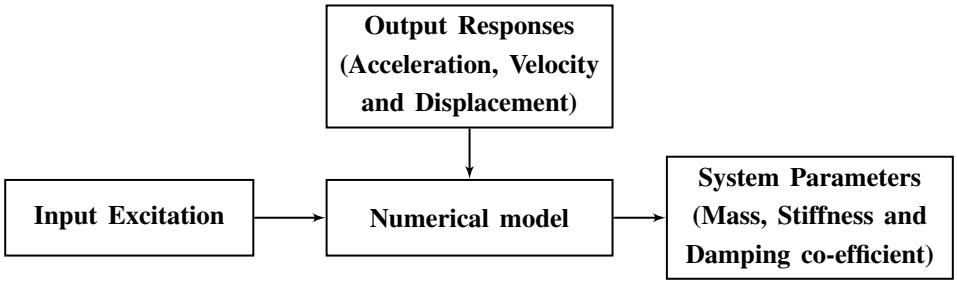

Figure 1.2: Inverse problem

a periodic force and the output responses are displacement, velocity and acceleration. The input force can be measured using force transducer and the output responses can be measured respectively using vibration pick-ups, velometer and accelerometer. Some **SI!** algorithms require measurement of all responses or any one of the output responses. Since the input and output responses are measurable for a structure with unknown parameters, the **SI!** problem is an inverse problem which identifies structural or damage parameters.

1.1.1 Sub sections

Sub-sections must be numbered as shown in this text.

Sub-sub sections

Sub-sections of sub section are not to be numbered and it should be in bold as shown in this text.

Important The last paragraph of this chapter shoud be a summary of the remaining part of the report.

Chapter 2

LITERATURE SURVEY

This chapter is to exlain your lit. survey

2.1 Frequency Domain SI

? showed that the magnitude of change in natural frequencies is a function of the severity and of the location of deterioration in structures. The modal analysis has been carried out on a welded steel frame and a wire rope with damage. **?** proposed a direct method for determining six flexural stiffnesses of a thin anisotropic plate. In this method, natural frequencies (**?**) and mode shapes have been processed using **LS!** (**LS!**) technique.

2.2 Particle Swarm Optimization

A basic variant of the **PSO!** (**PSO!**) (**?**) algorithm works by having a population (called a swarm) of candidate solutions (called particles). These particles are moved around in the search-space according to a few simple formulae. The movements of the particles are guided by their own best known position in the search-space as well as the entire swarm's best known position. When improved positions are being discovered these will then come to guide the movements of the swarm. The process is repeated and by doing so it is hoped, but not guaranteed, that a satisfactory solution will eventually be discovered.

2.3 Summary

Here a summary can be given, justifying your approach taken for this project.

2.4 Data Set(If applicable)

Here expain your dataset and explain the reason for selecting this dataset

2.5 Software/Tools Requirements

Here you can list the tools/librries/packages etc. with a brief description

Chapter 3

MODULARIZATION & PLAN

This chapter is for explaining your plan for completing the project.

3.1 Responsibilities of Team Members

Here you can provide the roles and responsibiities of team members; explain for each member.

3.2 Month Wise Plan

Brief plan for each month; pls refer the slide template for details.