CHAPTER 1

Introduction

* 1. Background

This should contain the background of the project topic, why it is important, where and whenit has began history etc.

* 1. Relevance

Relevance of the project/topic chosen to the field of Electronics and Communication engineeringand related subjects based on the curriculum is to be clearly explained here

* 1. Literature Survey

Literature survey should be as exhaustive as possible. Primarily, student should discuss previous studies/work done which specifically pertain to the project/problem/topic. Attempt to minimize referring to work which is indirectly related to topic. Avoid making forced connections and do not try to cram in irrelevant references.Please report all the relevant work carried out by various people/engineers around related to the topic and their limitations, advantages, disadvantages, salient features and applications.

* 1. Motivation

This part of theproject report must contain a brief mention of the gaps, limitations, further improvisation of the topic chosen in the existing workbased on the previous sub-section and a justification for undertaking your project/problem and why it needs a solution and further work.

* 1. Aim of the Project

State the problem what you are going tackle/solve in the project very clearly and

precisely here.

* 1. Scope and Objectives

Scope of the project has to be clearly defined and included in this part.What objectivesyou set out to achieve, and how this addressed the problem

* 1. Technical Approach

How you went about solving the problem and what is the technical approach you have adopted to solve the problem.

CHAPTER 2

Title of the Chapter 2

2.1 Introduction

The whole seminar report may be divided into appropriate number of chapters. Every chapter has to be introduced by linking the previous chapter, it has to be concluded and linked to the next chapter. It is mandatory that report is divided into chapters each of which may be structured into sections (1.1, 1.2) and sub-sections (1.2.1, 1.2.2). Do not exceed this level of sectioning. The sections and sub-sections must carry titles. If possible, try and use fonts for section titles and sub-section titles as given in this template. Every sub heading, equation, table, figure has to be indexed correctly and referred in the text at appropriate part of the text. All the figures, diagrams, flow charts, graphs to be treated as figures and indexed accordingly uniformly. Mere scanned copies of equations, figures, table etc must be strictly avoided.

* 1. Sub Heading
     1. Sub-Sub Heading
  2. Figures

Figures are expected to be drawn using drawing software, imported from other simulations software in original. They should not be just scan, copy paste from the literature. Figure has to be indexed and explained clearly as given in the followed.



Fig: 2.1. Basic Antenna Array Geometry

Further, it is assumed that the signal  is incident on an array of L isotropic elements shown in Fig. 2.1, from a direction with*θ*, *φ* being the elevation and azimuth angles respectively.

* 1. Equations

All the equations must be typed either in MS equation editor or any other compatible

equation editors. Equations scanned, copied are not acceptable. Please refer the following sample equation and follow the same uniformly throughout the report. All the symbols must be explained when they appear for the first time. Every equation must be explained clearly. For instance Eqn. (2.1) indicates that the equation number one in second chapter.

(2.1)

* 1. Tables

Table 2.1

Crossed dipole impedance matrix

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| --- | --- | --- | --- |
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CHAPTER 3

Title of the Chapter 3

CHAPTER 4

Results and Discussion

All the results and solutions obtained by carrying out project work may discussed qualitatively and quantitatively in detail.



Fig. 2.2 BER Performance of Basic Linear Array

N=2,*φ*=[150 -300 600 -700 800],*µ*=0.06,NI=15,M=5

(Co-ordinates in the block indicate X=SNR, Y=BER )

All the graphs should be clearly visible with title, labels of each axis, legends, and line markers as shown in Fig. 2.2 above. Graphs, results must be clearly interpreted in the text by explaining the numerical, its significance and inferences as followed.BER performance of the basic linear array of isotropic elements is carried out for various SNR and plotted in Fig. 2.2. Here, the algorithmic parameter *µ* is set to 0.06 and the initial weight vector to [0.1+0*i* 0.1+0*i*]. MBER solution converged to a lesser BER after 15 iterations that compared with MMSE solution. At SNR=15, the BER is found to be 10-7.662 and the weight vector to be [0.0228+0.0056*i* 0.0197+0.0127*i*] by MMSE approach, whereas, by MBER approach, BER is 10-9.907 and weight vector is [0.48000.7456+0.4623*i*].

CHAPTER 5

Conclusions

This summarizes what have been done and concluded based on the experiments/simulations/ project.The conclusions can be summed up as “What have you done, achieved and learnt by the end of the project?”Add important achievements with measurable outcomes. Also explain the applications of the work/project.

CHAPTER 6

Future Scope

Explain any limitations in your results and how things might be improved. Discuss how your work might be developed further. Reflect on your results in isolation and in relation to what others have achieved in the same field. This self-analysis is particularly important. You should give a critical evaluation of what went well, and what might be improved. This section should guide the future students to get motivated to take this work ahead.

References

* Minimum 25 References should be included here
* Follow the format below to write the references.

Books:

1. Constantine A. Balanis, *Antenna Theory: Analysis and Design*, 2nd Edition; John Wiley Sons Inc. New York, 2001, pp12-130

Transaction/Journals:

1. Inder J Gupta, Aharon A Ksienski, “Effect of Mutual Coupling on the Performance of Adaptive Arrays” *IEEE Trans. Antennas Propagat*., vol. AP-31, no.5, pp.785-791, Sept. 1993

International/National Conference Proceedings:

1. S. Chen,L. Hanzo, N.N. Ahmad, and A. Wolfgang “Adaptive minimum bit error rate beam forming assisted QPSK receiver,” *Proc. IEEE International Conference on Communications*, June, 2004, Paris, France
2. J. Lundback,S. Nordebo, “**Analysis of a tripole array for polarization and direction of arrival estimation”***Proc. IEEE Sensor Array and Multichannel Signal Processing Workshop Proceedings*, 2004, 18-21, July 2004, pp. 284 - 288

Standards/Patents:

1. G.Brandli and M. Dick, “Alternating current fed power supply,” U.S.Patent 4 084 217, Nov.4,1978

Technical Reports:

1. E. E. Reber, R. L. Mitchell, and C. J. Carter, “Oxygenabsorption in the Earth’s atmosphere,” Aerospace Corp.,Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov. 1968

Website:

1. M. Duncan. “Engineering Concepts on Ice. Internet: www.iceengg.edu/staff.html, Oct. 25, 2000 [Nov. 29, 2003].

Note: Above Red colored titles should not be included in the report. Only references are to be included.