### VISVESVARAYA TECHNOLOGICAL UNIVERSITY Jnana Sangama, Belagavi - 590 018



# Internship / Professional Practice Report

on

#### Title of the Project

Submitted in partial fulfillment for the award of degree of

 $Bachelor\ of\ Engineering$  in

Electronics and Communication Engineering

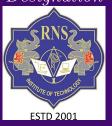
Submitted by

# Student Name USN

Internship carried out at Company Name

#### Internal Guide

Name of guide Designation



#### External Guide

Name of guide Designation



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (Accredited by NBA for the Academic Years 2018-19, 2019-20 and 2020-21)

#### RNS INSTITUTE OF TECHNOLOGY

(AICTE Approved, VTU Affiliated and NAAC 'A' accredited)
(UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA
for the Academic Years 2018-19, 2019-20 and 2020-2021)
Channasandra, Dr. Vishnuvardhan Road, Bengaluru-560098

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Jnana Sangama, Belagavi - 590 018



#### Internship / Professional Practice Report

#### Title of the Project

Submitted in partial fulfillment for the award of degree of

Bachelor of Engineering

Electronics and Communication Engineering

Submitted by

# Student Name **USN**

Internship carried out at Company Name

#### **Internal Guide**

Name of quide Designation



# External Guide

Name of quide **Designation** 



**ESTD 2001** 

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING (Accredited by NBA for the Academic Years 2018-19, 2019-20 and 2020-21)

#### RNS INSTITUTE OF TECHNOLOGY

(AICTE Approved, VTU Affiliated and NAAC 'A' Accredited) (UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA for the Academic Years 2018-19, 2019-20 and 2020-2021) Channasandra, Dr. Vishnuvardhan Road, Bengaluru-560098

#### RNS INSTITUTE OF TECHNOLOGY

(AICTE Approved, VTU Affiliated and NAAC 'A' Accredited)
(UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA
for the Academic Years 2018-19, 2019-20 and 2020-2021)
Channasandra, Dr. Vishnuvardhan Road, Bengaluru-560098

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Accredited by NBA for the Academic Years 2018-19,2019-20 and 2020-21)



### **CERTIFICATE**

This is to certify that the Internship/ Professional Practice work entitled "Title of the Intern Report" has been successfully carried at Intern Place by Student name bearing the usn 1RN16EC, bonafide student of RNS Institute of Technology in partial fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering from Visvesvaraya Technological University, Belagavi, during the year 2019-2020. It is certified that all corrections / suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in aspect of the project work prescribed for the award of degree of Bachelor of Engineering.

Name of the Guide Designation	Dr. Vipula Singh Head of Department External Viva	Dr. M K Venkatesha Principal
Name of the examiners		Signature with date
1		
9		

#### RNS INSTITUTE OF TECHNOLOGY

(AICTE Approved, VTU Affiliated and NAAC 'A' Accredited)
(UG Programs - CSE, ECE, ISE, EIE and EEE have been Accredited by NBA
for the Academic Years 2018-19, 2019-20 and 2020-2021)
Channasandra, Dr. Vishnuvardhan Road, Bengaluru-560098

# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

(Accredited by NBA for the acadamic Years 2018-19,2019-20 and 2020-21)



#### **DECLARATION**

I, Student Name bearing the USN:1RN16EC, pursuing Bachelor of Engineering in Electronics & Communication, RNS Institute of Technology, Bangalore. I hereby declare that the internship titled, "Title" has been independently carried out under the supervision and guidance of External guide, designation and Internal guide, designation. Submitted as a partial fulfilment for the award of Bachelor of Engineering degree in Electronics and Communication Engineering from Visvesvaraya Technological University, Belagavi during the academic year 2019-20. I also declare that the internship has not been submitted previously for the award of any degree or diploma to any institution.

Student Name

1RN16EC



# CERTIFICATE OF COMPLETION INTERNSHIP

We present this certificate to

# **SUHAS M ANGADI**

In appreciation for your successful work as intern at VI Solutions, Bangalore, From 04-Jul-2019 to 03-Aug-2019 & La

Mr. Sunil Kumar V Managing Director VI Solutions, Bangalore

### Acknowledgement

The joy and satisfaction that accompany the successful completion of any task would be incomplete without thanking those who made it possible. We consider ourselves proud to be a part of RNS Institute of Technology, the institution which molded us in all our endeavors.

We express our gratitude to our beloved Chairman **Dr. R N Shetty**, for providing state of art facilities.

We express our deep gratitude to **Dr. H N Shivashankar**, Director, who has always been a great source of inspiration.

We would like to express our sincere thanks to **Dr. M K Venkate-sha**, Principal and Dr. Vipula Singh, Professor and HOD, Department of E&CE, for their valuable guidance and encouragement throughout our program.

I extend my sincere thanks and heartfelt gratitude to my internal guide **Name**, Designation, for providing me an invaluable support throughout the period of my Internship.

I wish to express my heartfelt gratitude to my external guide **Name**, Designation place for his valuable guidance, suggestions and cheerful encouragement during the entire period of my internship.

I would like to sincerely thank all those people who have been supporting in the part of my internship at *Company*.

Finally, I take this opportunity to extend my earnest gratitude and respect to my parents, teaching and non-teaching staff of the department, the library staff and all my friends who have directly or indirectly supported me during the period of my Internship

Name1

# Executive Summary

# Table of Contents

Table of Contents		iii
Li	st of Figures	iv
Li	ist of Tables	$\mathbf{v}$
A	cronyms	vi
1	Introduction	1
	1.1 About company	1
	1.2 History	1
	1.3 Topic 3	1
	1.4 Topic 4	1
	1.5 Topic 5	1
2	Project Introduction	2
3	Project Design and Development	3
4	Outcomes	4
5	Conclusion and Future scope	5
$\mathbf{R}$	eferences	6
$\mathbf{A}$	ppendices	7
Α	Topic 1	7

# List of Figures

# List of Tables

# Acronyms

PCB: Printed Circuit Board

# Chapter 1

# Introduction

Type random text here

### 1.1 About company

Title: Remote servicing of IPTV using DirectFB and VNC.

# 1.2 History

Assume you have an IPTV in your home and it has some technical problem. It will be better if the TV technician can solve the problem remotely over Internet.

### 1.3 Topic 3

The project involves 2 primary objectives

- 1. Exploring VNC system module of DirectFB and building it onto the target IPTV
- 2. Extending remote accessibility of IPTV from outside LAN

# 1.4 Topic 4

DirectFB features and VNC features have been implemented in IPTV independently.

# 1.5 Topic 5

The primary goal is establishing communication between IPTV and a remote PC for remote serviceability of IPTV.

# Chapter 2 Project Introduction

# Chapter 3

# Project Design and Development

# Chapter 4

# Outcomes

# Chapter 5 Conclusion and Future scope

# References

- [1] Andrew S. Tanenbaum: Operating Systems Design and Implementation, Prentice Hall, 2006
- [2] About IPTV on Wikipedia http://en.wikipedia.org/wiki/IPTV
- [3] About VNC on Wikipedia http://en.wikipedia.org/wiki/Virtual\_ Network\_Computing
- [4] LibVNC server http://libvncserver.sourceforge.net
- [5] DirectFB documentation http://elinux.org/DirectFB
- [6] jointSPACE documentation http://sourceforge.net/apps/mediawiki/jointspace/index.php?title=Main\_Page
- [7] PuTTy on Wikipedia http://en.wikipedia.org/wiki/PuTTy
- [8] Nicola L. C Talbot and Gavin C. Cawley. A fast index assignment algorithm for robust vector quantisation of image data. In Proceedings of the I.E.E. International Conference on Image Processing, Santa Barbara, California, USA, October 1997.

# Appendix A

# Topic 1