

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*

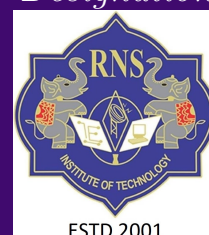
Internal Guide

*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)

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Channasandra, Dr. Vishnuvardhan Road, Bengaluru-560098

2019-20

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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

.....
Dr. M K Venkatesha

Principal

External Viva

Name of the examiners

Signature with date

1

.....

2

.....

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ESTD 2001

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 *of* 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*


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 Venkatesha**, 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

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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.E. International Conference on Image Processing*, Santa Barbara, California, USA, October 1997.

Appendix A

Topic 1