

Program Book

Short Term Internship

AP STATE COUNCIL OF HIGHER EDUCATION
(A STATUTORY BODY OF GOVERNMENT OF ANDHRA PRADESH)

Program Book for Short-Term Internship

Name of the Student: T·M·N·D·Varla Prasad
Name of the College: Prakasam degree college

Registration Number: 214067102031

Period of Internship: From: 01/09/2023 To: 30/09/2023

Name & Address of the Intern Organization

SKILLTRONIKS
Technology PVT LTD

Instructions to Students

Please read the detailed Guidelines on Internship hosted on the website of AP State Council of Higher Education <https://apsche.ap.gov.in>

1. It is mandatory for all the students to complete 2 months (180 hours) of short-term internship either physically or virtually.
2. Every student should identify the organization for internship in consultation with the College Principal/the authorized person nominated by the Principal.
3. Report to the intern organization as per the schedule given by the College. You must make your own arrangements of transportation to reach the organization.
4. You should maintain punctuality in attending the internship. Daily attendance is compulsory.
5. You are expected to learn about the organization, policies, procedures, and processes by interacting with the persons working in the organization and by consulting the supervisor attached to the interns.
6. While you are attending the internship, follow the rules and regulations of the intern organization.
7. While in the intern organization, always wear your College Identity Card.
8. If your College has a prescribed dress as uniform, wear the uniform daily, as you attend to your assigned duties.
9. You will be assigned with a Faculty Guide from your College. He/She will be creating a WhatsApp group with your fellow interns. Post your daily activity done and/or any difficulty you encounter during the internship.
10. Identify five or more learning objectives in consultation with your Faculty Guide. These learning objectives can address:
 - Data and Information you are expected to collect about the organization and/or industry.
 - Job Skills you are expected to acquire.
 - Development of professional competencies that lead to future career success.
11. Practice professional communication skills with team members, co-interns and your supervisor. This includes expressing thoughts and ideas effectively through oral, written, and non-verbal communication, and utilizing listening skills.

12. Be aware of the communication culture in your work environment. Follow up and communicate regularly with your supervisor to provide updates on your progress with work assignments.
13. Never be hesitant to ask questions to make sure you fully understand what you need to do your work and to contribute to the organization.
14. **Be regular in filling up your Program Book. It shall be filled up in your own handwriting. Add additional sheets wherever necessary.**
15. At the end of internship you shall be evaluated by your Supervisor of the intern organization.
16. There shall also be evaluation at the end of the internship by the Faculty Guide and the Principal.
17. Do not meddle with the instruments/equipment you work with.
18. Ensure that you do not cause any disturbance to the regular activities of the intern organization.
19. Be cordial but not too intimate with the employees of the intern organization and your fellow interns.
20. You should understand that during internship programme, you are the ambassador of your College, and your behavior during the internship programme is of utmost importance.
21. If you are involved in any discipline related issues, you will be withdrawn from the internship programme immediately and disciplinary action shall be initiated.
22. Do not forget to keep up your family pride and prestige of your College.

**An Internship Report
On
(Title of the Internship)**

Submitted in accordance with the requirement for the degree of B.Sc.(MPCS)

Name of the College: Prakasam degree college

Department: computer science

Name of the Faculty Guide: K.sai Bhavan'i

Duration of the Internship: From 01/09/23 To 30/09/23

Name of the Student: T.M.N.D.Varaprasad

Programme of Study IOT

Year of Study: 22 - 2023

Register Number: 214067102031

Date of Submission:

04/10/2023

Student's Declaration

T.M.N.D Varaprasad

I, a student of Program, Reg. No. 214067102031 of the Department of Computer Science College do hereby declare that I have completed the mandatory internship from 01/09/23 to 30/09/2023 in Skilltroniks (Name of the intern organization) under the Faculty Guideship of K.SaiBhavani (Name of the Faculty Guide), Department of Computer Science Prakasam Degree College... (Name of the College)

T. Mani
(Signature and Date)

Endorsements

K.S. Bhavani
Faculty Guide
Prakasam Degree College
Koyyalagudem, W.G.Dt.

H. Prasad
Head of the Department
Prakasam Degree College
Koyyalagudem, W.G.Dt.

J. S. J
Principal
PRINCIPAL
Prakasam Degree College
KOYYALAGUDEM
W.G.Dt.-534312



SKILLTRONIKS®
TECHNOLOGIES PVT LTD

Recognized by DIPP & Registered under MSME, Govt. of India

CERTIFICATE

of Participation

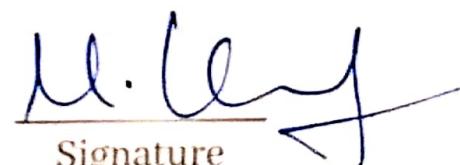
THIS CERTIFICATE IS PROUDLY PRESENTED TO

Tammineedi M N D Vara Prasad

studying III yr B.Sc.(M.P.Cs) in Prakasam Degree College, Koyyalagudem
for successful completion of short-term Internship on

Embedded systems & IoT

from 1st September to 30th September 2023.


Signature



ACKNOWLEDGEMENTS

we express our cordial thanks to one and all who have extended full co-operation to complete the project work.

- we would like to express our sincere thanks to our correspondent sir. v. Janardhan Rao, who permitted us to do this project work

we must express our heartfelt thanks to princi
Pr. ct. Hanuman CHOWDARY pralekam degree

Koyyala Guider

m.s.v.v prasad.

we are deeply indebted to G. Lakshmi Sankara
rao for their valuable suggestions and guidance
to complete this pro

we are also thankful to all my friends and
relatives and well wishes for their help in
doing this project work.

This project is an attempt to focus attention
of T in Koyyala guider area, to know in sign
for solving the existing problem

CHAPTER I: EXECUTIVE SUMMARY

The Internship report shall have only a one-page executive summary. It shall include one or more Learning Objectives and Outcomes achieved, a brief description of the sector of business and intern organization and summary of all the activities done by the intern during the period.

Embedded System And IoT?

An Embedded system is a combination of computer hardware and software designed for a specific function. Embedded systems may also function within a larger system. The system can be programmable or have a fixed functionality. Industrial machines, consumer electronics, agriculture and processing industry devices, Automobiles, medical equipment, cameras, digital watches, household applications, airplanes, vending machines and toys.

The learning objective for Embedded system is "to control a specific function within a device and gives us an introduction to the various".
In Embedded system, as we came to Embedded system, Hem Patel explains about real time of Internet of things, ICs to conduct interfacing of embedded bonds with Components.

CHAPTER 2: OVERVIEW OF THE ORGANIZATION

Suggestive contents

- A. Introduction of the Organization
- B. Vision, Mission and Values of the Organization
- C. Policy of the Organization, in relation with the Intern role
- D. Organizational Structure
- E. Roles and responsibilities of the employees in which the intern is placed.
- F. Performance of the Organization in terms of turnover, profits, market reach and market value.
- G. Future Plans of the Organization.

-as the name suggests, Embedded means something that is attached to another thing an Embedded system has a hardware, and also application software. It has real time as that requires that application software and provide mechanism to let the processor run a process. It sets a rules during the execution of application program.

-the roles & responsibilities of our team members in the Project is to are comprising the bonds to sensors and the other two are working on code.

CHAPTER 3: INTERNSHIP PART

Description of the Activities/Responsibilities in the Intern Organization during Internship, which shall include - details of working conditions, weekly work schedule, equipment used, and tasks performed. This part could end by reflecting on what kind of skills the intern acquired.

SPddu, Pavan, Srinu, sai. kiran, mahesh me and pavan worked on the code for the task we are performing , Srinu and SP had connected the Board to the sensors using Jumper wires , where mahesh had recording the output of the task , we had done lot of activities in the duration of the five week like, Blynk , fading , flame , sunler , IR sensor , 8R sensor , Raindrop sensors , working etc. and learned a lot of new things during this time . Intern also.

ACTIVITY LOG FOR THE FIRST WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	we have introduced ourselves and interacted with staff, also discussed about the types of embedded system.	self intro and outline of embedded system & its types.	R
Day - 2	we learnt briefly about embedded system & its type and uses of es in daily life	on whole we found what is embedded system & types	R
Day - 3	on this day we learnt about circuits & types of circuits in addition electronic circuit properties	what is a circuit ? And types of circuits.	R
Day - 4	our guides illustrated about current, ohm's law, AC & DC currents	we learnt about ohm's law & current	R
Day - 5	on the 5th day of this week we had learnt more about led's parts of led's	what is an LED ? and parts of led's	R
Day - 6	on the last day of this week we learnt about diodes and types	we gathered info regarding diode & types of diodes	R

WEEKLY REPORT

WEEK - 1 (From Dt. 11.9/1.3.... to Dt..5/..9/2.3.)

Objective of the Activity Done:

Detailed Report:

The main challenge we found this week was finding new content about embedded system - fortunately we had two guides.

To teach about embeded system & ESS, when we started the project on the first day we introduced ourselves & discussed outline of embeded system

on second day we briefly learnt about ESS and types of ESS in this week we also gathered the info regarding Circuits and electronics and its properties our guides arrest in addition ohm's learnt more about LED & parts of LED , Diodes types of Diodes etc.

This week was really a great experience for us we learnt mainly new things about embeded system & Bot.

WEEKLY REPORT

WEEK - 2 (From Dtsf/2/23.... to Dt.11/2/23....)

Objective of the Activity Done:

Detailed Report:

on the second week of our Pnternship we came to know about resistors and colour codes in resistors by using a code also about variable resistor & potentiometer in addition motors and types of motors like ac motor, d.c motor, step, servo motor and the usage of these motors

In this Internship we need to do some work were boards Ipk-Arduino uno Board, Esp32 Board etc. so, we had learnt about Arduino uno Board's types of pins in this Board & the connections we need to connect using Jumper wires to get the respective outputs.

And also types of communication like analog communication & digital communication these are the activities we done on the second week of Pnternship

ACTIVITY LOG FOR THE THIRD WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	we have started working on codes by installing Arduino app in our system	installed Arduino App in our systems	P
Day - 2	we have installed certain libraries needed to write the code	installed the libraries needed	P
Day - 3	Came to know about all the terms and uses of words that appears on Arduino app & used	Came to know how to use arduino app	P
Day - 4	we had learnt about the terms, declarations header file & libraries in the code	learnt about formation of a particular code	P
Day - 5	our guide distributed a kit in which they place all the things for project	know about the thing which we will use in project	P
Day - 6	we executed our first code LED Blink on the last day of the week	Executed LED Blink	P

WEEKLY REPORT

WEEK - 3 (From Dt. 21.9.22.... to Dt. 12.9.22.)

Objective of the Activity Done:

Detailed Report:

This is the third week that we started our internship on the first day of this week we installed Arduino Apps on our system and repeated libraries required for the task.

and we learnt how to use the app and known about all terms & usage on the display also they explained about the codes we need to write, principally about header files, libraries declarations etc.

they also distributed a list on which all the things which we will use in this project items like boards, sensors, jumper wires, cables, LED, etc.

on the last day of this week we executed our first code for blinking a LED and we are more excited for our future.

tasks after completion of LED Blink.

ACTIVITY LOG FOR THE FOURTH WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	Explained about diffrent types of sensors and their usage.	what is a CCP star and colour code of resistor	R
Day - 2	On this day we have executed the codes for LED on & off and LED fading on & off & fading	LED on & off and LED fading	R
Day - 3	We learnt about varifible sensor by using LDR & Buzzers	executed code for detecting flame.	R
Day - 4	We have used IR sensor to detect any obstruction within 30cm	executed code for detecting flame.	R
Day - 5	On this day we used potentiometer to increase / decrease the brightness.	Came to know about use of potentiometer	R
Day - 6	And finally we celled LDR to CCP Ibus output	DPLancerd slip on LDR	R

WEEKLY REPORT

WEEK - 4 (From Dt. 1/9/23... to Dt. 24/9/23...)

Objective of the Activity Done:

Detailed Report:

In this week we used Arduino Uno board and performed certain activities on the first day we came to know about different type of sensor and their usage.

On second day we executed a code for on & off LED and also for fading of LED. P.p the brightness will increase & decrease slowly we checked our op by connecting LED to the Uno board.

To check any obstruction we use IR sensor and to increase or decrease the sound (light we use potentiometer and finally by using LDR we can display op on LDR sensor.

CHAPTER 5: OUTCOMES DESCRIPTION

Describe the work environment you have experienced (in terms of people interactions, facilities available and maintenance, clarity of job roles, protocols, procedures, processes, discipline, time management, harmonious relationships, socialization, mutual support and teamwork, motivation, space and ventilation, etc.)

We have completed our short term internship in our college itself and the other college students also joined with us in this. During we interacted with each other and our college provided the facilities like laptops, desktops, ppts etc.

Regularly our class starts at 10 am and end by 4 pm also our teacher motivated us a lot, to succeed. In this period we can't complete this project easily without the mutual support of our team our teammates worked hard to complete the short term.

Also our lab is very spacious the process of our project is they will distribute the topic according to the term we are going to do. and then they will explain about the going things in that topic.

Describe the real time technical skills you have acquired (in terms of the job-related skills and hands on experience)

Our short term internship is embedded system and job which plays the major role in present and future. That was the main reason why we have selected this concept.

We have acquired the real time technical skills like Embedded C and other basics about electronics knowledge of microcontrollers and microprocessors, ability to work with hardware; communication & collaboration skills, continuous learning & improvement.

On the completion of the course, we successfully perform an entry level embedded system develop and maintain applications written using embedded C.

Describe the managerial skills you have acquired (in terms of planning, leadership, team work, behaviour, workmanship, productive use of time, weekly improvement in competencies, goal setting, decision making, performance analysis, etc.

Managerial skills are the abilities and traits needed to perform certain duties. During this project, we have acquired the skills like communication, solving problems, overseeing a team, and then first dividing of our project we have work. Time is the main thing we need to handle perfectly to complete a particular task.

We have divided our duty into partitions and assign the works which made easy to complete a task.

These are the managerial skills we have acquired.

Describe how you could improve your communication skills (in terms of improvement in oral communication, written communication, conversational abilities, confidence levels while communicating, anxiety management, understanding others, getting understood by others, extempore speech, ability to articulate the key points, closing the conversation, maintaining niceties and protocols, greeting, thanking and appreciating others, etc.,)

Communication today is very important both in business world and in private life - successful communication helps us better understand people and situations it helps over come diversities build trust and respect.

a. Had improved my oral communication more by using a mirror to practice, listening in our lectures & classes, listening is the key to improve our listening confidence while speaking attracts the person towards own conversation we have improved this by giving speech and by talking to all teammates in a team work we need to appreciate!

Describe how could you could enhance your abilities in group discussions, participation in teams, contribution as a team member, leading a team/activity.

we can enhance our abilities by respecting the contribution of other speakers and listening to ideas of other speakers. They we can. Team something

And we meet aware of topic relating to all background by avoiding aggression in group discussion meet communicate effectively.

we meet help our team by seeing our strengths clearly understand our role and stay the flexible if reliable control the project is completed be positive and help others as much as you can

Describe the technological developments you have observed and relevant to the subject area of training (focus on digital technologies relevant to your job role)

The technology had developed a lot in recent times some of them I have observed related to Embedded system. And IoT are.

These advancements includes wireless modules and enhanced Bluetooth technology logics which aims to minimize power consumption at the hardware.

Embedded system in home comfort such as thermostats that regulate temps automatically for a comfort improvement laundry machines with embedded system.

Student Self Evaluation of the Short-Term Internship

Student Name: & Registration No: T·M·N·D·V·oopaPrasad

Term of Internship: From 01/09/23 To 30/09/23

Date of Evaluation: 4/10/2023

Organization Name & Address: skiltroniks

Name & Address of the Supervisor K·sai Bhavani
with Mobile Number:

7981705620

Please rate your performance in the following areas:

Rating Scale: Letter grade of CGPA calculation to be provided

1) Oral communication	1	2	3	4	5
2) Written communication	1	2	3	4	5
3) Initiative	1	2	3	4	5
4) Interaction with staff	1	2	3	4	5
5) Attitude	1	2	3	4	5
6) Dependability	1	2	3	4	5
7) Ability to learn	1	2	3	4	5
8) Planning and organization	1	2	3	4	5
9) Professionalism	1	2	3	4	5
10) Creativity	1	2	3	4	5
11) Quality of work	1	2	3	4	5
12) Productivity	1	2	3	4	5
13) Progress of learning	1	2	3	4	5
14) Adaptability to organization's culture/policies	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

T. Mani
Signature of the Student

Evaluation by the Supervisor of the Intern Organisation

Student Name & Registration No: 214067102031

Term of Internship: From 01/09/2023 To 30/09/2023

Date of Evaluation: 4/10/2023

Organization Name & Address: skiltroniks

Name & Address of the Supervisor K.SaiBhavani
with Mobile Number: 7981705620

Please rate the student's performance in the following areas:

Please note that your evaluation shall be done independent of the Student's self-evaluation

Rating Scale: 1 is lowest and 5 is highest rank

1) Oral communication	1	2	3	4	5
2) Written communication	1	2	3	4	5
3) Initiative	1	2	3	4	5
4) Interaction with staff	1	2	3	4	5
5) Attitude	1	2	3	4	5
6) Dependability	1	2	3	4	5
7) Ability to learn	1	2	3	4	5
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13) Progress of learning	1	2	3	4	5
14) Adaptability to organization's culture/policies	1	2	3	4	5
15) OVERALL PERFORMANCE	1	2	3	4	5

K.S. Bhavani

Signature of the Supervisor

DEPARTMENT OF COMPUTER SCIENCE

GRADUATE DEPT. OF COMPUTER SCIENCE

KOYYILAGUDLEM VILLAGE