[Your College Logo]

Industrial Internship Report on

"Bank management system"

Prepared by

[G Mamatha]

| Executive Summary |
|---|
| This 6 weeks unicoverage internship is the best hands on experience for me to learn about the data science and machine learning In detail

And at the end of the project I have even done my own project

Project name:Bank management system

It is completely about creating the login page to the banking and depositing money creating an account at the bank and withdrawing the money etc |

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1 Preface

The 6 weeks internship provided by unicoverages is the best and it give a hands on experience to the students.

And I even developed a banking management system and it is all about the working of a bank system.
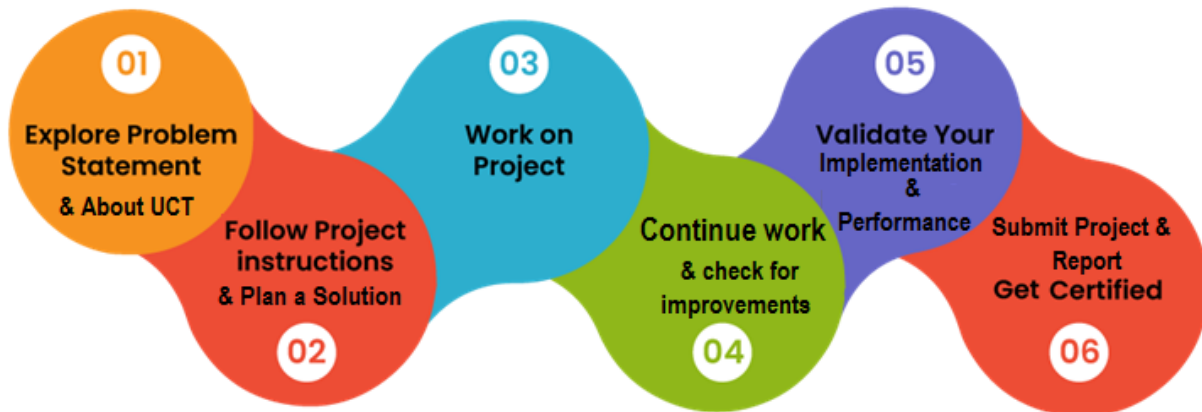
I have a lot about datascience and machine learning.

Thank to all unicoverages team , who have helped me throughout this internship.

I will suggest my juniors and peers that this is the best internship platform to get real time experience.

2 Introduction

2.1 About UniConverge Technologies Pvt Ltd

A company established in 2013 and working in Digital Transformation domain and providing Industrial solutions with prime focus on sustainability and RoI.

For developing its products and solutions it is leveraging various **Cutting Edge Technologies e.g. Internet of Things (IoT), Cyber Security, Cloud computing (AWS, Azure), Machine Learning, Communication Technologies (4G/5G/LoRaWAN), Java Full Stack, Python, Front end** etc.

i. UCT IoT Platform (uct Insight)

UCT Insight is an IOT platform designed for quick deployment of IOT applications on the same time providing valuable "insight" for your process/business. It has been built in Java for backend and ReactJS for Front end. It has support for MySQL and various NoSql Databases.

- It enables device connectivity via industry standard IoT protocols - MQTT, CoAP, HTTP, Modbus TCP, OPC UA

- It supports both cloud and on-premises deployments.

It has features to
- Build Your own dashboard
- Analytics and Reporting
- Alert and Notification
- Integration with third party application(Power BI, SAP, ERP)
- Rule Engine
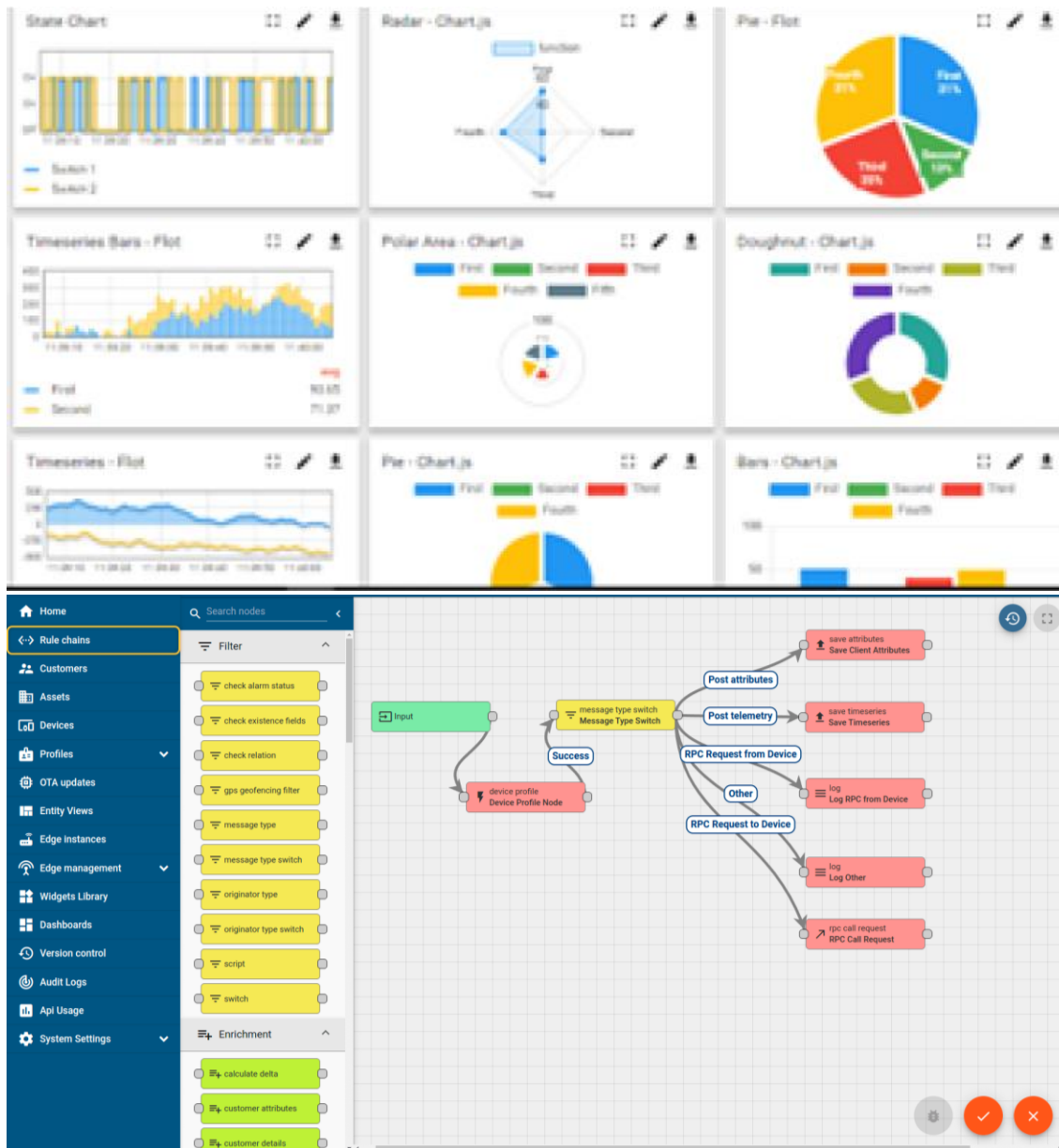
ii. Smart Factory Platform (**FACTORY WATCH**)

Factory watch is a platform for smart factory needs.

It provides Users/ Factory

- with a scalable solution for their Production and asset monitoring

- OEE and predictive maintenance solution scaling up to digital twin for your assets.

- to unleased the true potential of the data that their machines are generating and helps to identify the KPIs and also improve them.

- A modular architecture that allows users to choose the service that they what to start and then can scale to more complex solutions as per their demands.

Its unique SaaS model helps users to save time, cost and money.

Machine	Operator	Work Order ID	Job ID	Job Performance	Job Progress		Output		Rejection	Time (mins)				Job Status	End Customer
					Start Time	End Time	Planned	Actual		Setup	Pred	Downtime	Idle		
CNC_S7_81	Operator 1	WO0405200001	4168	58%	10:30 AM		55	41	0	80	215	0	45	In Progress	i
CNC_S7_81	Operator 1	WO0405200001	4168	58%	10:30 AM		55	41	0	80	215	0	45	In Progress	i
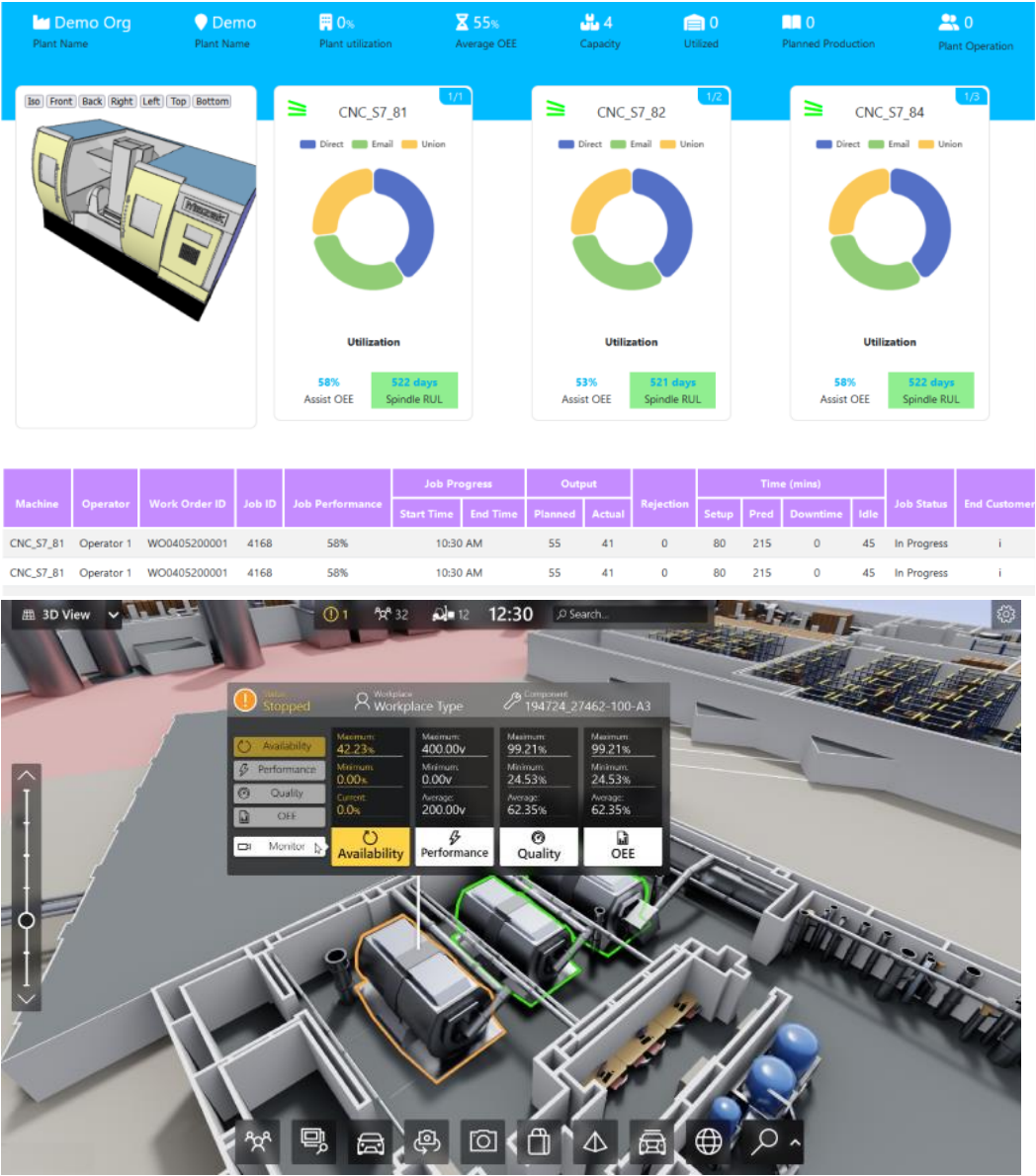
iii.   **LoRaWAN™**   based Solution

UCT is one of the early adopters of LoRAWAN teschnology and providing solution in Agritech, Smart cities, Industrial Monitoring, Smart Street Light, Smart Water/ Gas/ Electricity metering solutions etc.

iv.   Predictive Maintenance

UCT is providing Industrial Machine health monitoring and Predictive maintenance solution leveraging Embedded system, Industrial IoT and Machine Learning Technologies by finding Remaining useful life time of various Machines used in production process.

2.2   About upskill Campus (USC)

upskill Campus along with The IoT Academy and in association with Uniconverge technologies has facilitated the smooth execution of the complete internship process.

USC is a career development platform that delivers **personalized executive coaching** in a more affordable, scalable and measurable way.
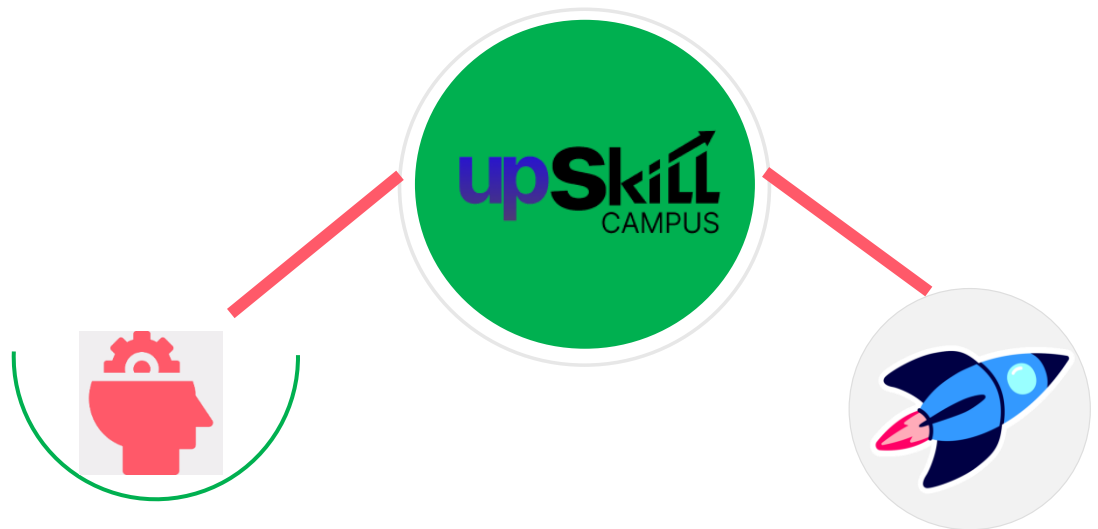
Seeing need of upskilling in self paced manner along-with additional support services e.g. Internship, projects, interaction with Industry experts, Career growth Services

upSkill Campus aiming to upskill 1 million learners in next 5 year

https://www.upskillcampus.com/

Career growth/upskilling
- Interview Preparation and skill building
- upskilling Courses
- Skill Assessment
- Profile building

Professional networking
- Alumni Connections
- Mentorship
- Discussion/QA forum

Collaboration platform
- Project collaboration
- Discussion forum
- Tech updates

Job/internship platform
- Job portal
- Internship portal
- Freelancing projects

2.3 The IoT Academy

The IoT academy is EdTech Division of UCT that is running long executive certification programs in collaboration with EICT Academy, IITK, IITR and IITG in multiple domains.

2.4 Objectives of this Internship program

The objective for this internship program was to

☛ get practical experience of working in the industry.

☛ to solve real world problems.

☛ to have improved job prospects.

☛ to have Improved understanding of our field and its applications.

☛ to have Personal growth like better communication and problem solving.

2.5 Reference

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[2]

[3]

2.6 Glossary

Terms	Acronym

3   Problem Statement

It's a GUI-based project used with the Swing module to organize all the elements that work under bank management.

4   Existing and Proposed solution

The first step will be to create a new project. In the src folder creating a bank package. In that package, we will be creating some files for different modules.

To connect the system with the database you will need to follow certain steps.

- Have Java JDK already installed and an IDE like Eclipse
- Install MySQL on the system.
- Download MySQL connector
- In Eclipse, under your project expand external libraries and right-click, and select Open Library Settings. Select the libraries tab and click on the + button. Browse your jar file downloaded from the above step and click on it. This will add a dependency to your project. The steps will differ if you are using a different IDE.

4.1   Code submission (Github link)

https://github.com/Gmamatha13/upskillcampus.git

4.2   Report submission (Github link) : first make placeholder, copy the link.

5 Performance Test

This is very important part and defines why this work is meant of Real industries, instead of being just academic project.

Here we need to first find the constraints.

How those constraints were taken care in your design?

What were test results around those constraints?

Constraints can be e.g. memory, MIPS (speed, operations per second), accuracy, durability, power consumption etc.

In case you could not test them, but still you should mention how identified constraints can impact your design, and what are recommendations to handle them.

5.1 Test Plan/ Test Cases

5.2 Test Procedure

5.3 Performance Outcome

6   My learnings

I learnt many things in depth about datascience and machine learning

And how to create a project and I will help in my future to develop more projects on data science and machine learning.

7 Future work scope

I think I should create an user friendly software in banking to make it more useful for the people to use.