

Industrial Internship Report on "Banking Information System"

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Executive Summary

This report provides details of the Industrial Internship provided by Upskill Campus and The IoT Academy in collaboration with Industrial Partner UniConverge Technologies Pvt Ltd (UCT).

This internship focused on building an *Employee Task Management System* using the MERN (MongoDB, Express.js, React.js, Node.js) stack. The goal was to create a system where managers can assign, monitor, and track employees' tasks efficiently.

This internship gave me exposure to real-world industry problems and helped me learn how to design and implement complete full-stack solutions.

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1. Preface

This 6-week internship provided an opportunity to develop a full-stack Employee Task Management System.

The internship enhanced my technical and problem-solving skills by allowing me to apply

classroom learning to a real-world use case.

I sincerely thank Upskill Campus, UniConverge Technologies Pvt Ltd, and my mentors for their support and guidance throughout this internship.

2. Introduction

2.1 About UniConverge Technologies Pvt Ltd

UniConverge Technologies (UCT) is a company established in 2013, working in the Digital Transformation domain and providing industrial IoT solutions leveraging technologies like IoT, Cybersecurity, Cloud Computing, Machine Learning, Java Full Stack, and Python.

2.2 About Upskill Campus

Upskill Campus, in collaboration with The IoT Academy and UCT, facilitates hands-on industrial training and project-based learning for students across various domains.

2.3 The IoT Academy

The IoT Academy is an EdTech division of UCT that partners with EICT Academy, IIT Kanpur, IIT Roorkee, and IIT Guwahati to deliver executive certification programs.

2.4 Objectives

- Gain real-world industry experience
 - Learn to develop and deploy full-stack web applications
 - Improve problem-solving, teamwork, and communication skills
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3. Problem Statement

Develop a full-stack *Employee Task Management System* where admins can manage employee data, assign tasks, track progress, and employees can update task status in real-time.

4. Existing and Proposed Solution

Existing solutions are often paid or too complex.

Our proposed system provides a simple, intuitive, and scalable task management solution using React.js (frontend), Node.js/Express (backend), and MongoDB (database).

4.1 Code submission (GitHub link):

👉 <https://github.com/Github-HarshTripathi/upskillcampus>

4.2 Report submission (GitHub link):

👉 https://github.com/Github-HarshTripathiupskillcampus/blob/main/Bankinginformation%20System_Harsh%20USC_UCT.pdf

5. Proposed Design / Model

5.1 High Level Diagram

(Insert architecture diagram — Frontend ↔ Backend ↔ Database)

5.2 Low Level Diagram

(Insert flowchart showing login, task creation, status update, etc.)

6. Performance Test

- **Tested APIs:** Task creation, task updates, login, registration
- **Frontend performance:** Optimized using React hooks
- **Database:** MongoDB indexing used for faster task queries

Outcome: System handled 100+ simulated tasks smoothly without lag.

7. My Learnings

- Improved full-stack development and version control (Git & GitHub)
 - Learned API integration, REST architecture, and React state management
 - Gained teamwork, planning, and project management skills
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8. Future Work Scope

- Implement task analytics dashboard
- Add notifications & role-based access
- Deploy project on cloud (AWS/Render)