

Dipu Kumar Sah

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EDUCATION

RR Institute of technology

B.E. in Computer Science & Engineering (GPA: 7.86/10.0)

Bengaluru, India

Aug 2020 – June 2024

OM National Academy

Pre-University Percentage: 71.5%

Birgunj, Nepal

Aug 2017 – May 2019

EXPERIENCE

KodNest – Java Intern

March 2025 - Present

- Gained hands-on experience in Java, Hibernate, Spring Framework, and Spring Boot for backend development.
- Worked with SQL databases and explored Python and Django for building web applications.
- Learned frontend technologies including HTML, CSS, JavaScript, and React to develop responsive UIs.

Python and Machine Learning – Intern

Aug 2023 – Sep 2023

KARUNADU TECHNOLOGIES PVT LTD

Hyderabad, India

- I had the opportunity to learn Python, Machine Learning and analysis model.
- Designed and developed a happiness project, leveraging various datasets and algorithms to predict either a person will be happy or not before buying a house.

PROJECTS

ToDo-SubToDo | (to-do-sub-to-do.vercel.app/)

GitHub

React.js, TypeScript, Tailwind CSS

ReactJS with TypeScript

- Built a recursive Todo management app using **React (TypeScript), useState, useEffect, and useContext**, allowing users to create, edit, and delete **todos and infinitely nested subtodos**.
- Implemented **persistent state management with localStorage** to ensure data consistency, synchronization, and safety from loss even after browser reloads or closures.
- Overcame **challenges of deeply nested component updates** and ensured seamless editing and synchronization of subtodo hierarchies through efficient **Added comments for each function to increade readability of code**.

Timetable Generating System

GitHub Frontend

GitHub Backend

React, React Router, Nodejs, Express, MongoDB

MERN Stack

- Developed a web app for schools and universities using a **custom-built genetic algorithm** to automate timetable generation based on teacher inputs, ensuring conflict-free scheduling.
- Implemented back end functionalities with javascript, nodejs, Expressjs, and mongodb for user authentication, data storage, and Restful API; and built a responsive react front end with React Router for smooth navigation.
- Overcame challenges in designing and writing the genetic algorithm to **manage multiple constraints efficiently, reducing manual workload** and improving scheduling accuracy for educational institutions.

TECHNICAL SKILLS

Java and Spring Boot: java, JDBC, hibernate, jpa, Spring Framework, Spring Boot, sql, postgresql

JavaScript and MERN Stack: javascript, TypeScript, NodeJs, ReactJS, ExpressJS, Redux, React Router, MongoDB

Python : python, django

Other languages & Tools: c, php, git, github, postman, nosql, mongooes, API Development