

## Achintya Raj

Backend Developer • Software Developer • Content Writer

RVS College of Engineering & Technology (RVSCET) • 2023 Pass out

## Work Experience

# Junior Software Developer @ Matrix Media Solutions Private Limited. Kolkata

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Aug 2023 - Feb 2024 (7 months) | Full-time

- Collaborated with Design, Product, and Testing teams in an Agile environment to ensure timely delivery of project goals. Engaged in discussions, planning sessions, and stand-ups to align development efforts with project objectives. Actively participated in sprint planning, reviews, and retrospectives to iteratively improve project processes and outcomes.
- Focused on backend development following MVC architecture and industry best practices. Developed backend APIs to support various functionalities, ensuring robustness, scalability, and maintainability of the system. Leveraged frameworks and libraries such as Express.js and multer to streamline development and enhance functionality.
- Played a pivotal role in the development of a Dentist Patient Referral System. Implemented a real-time chat application using Web Sockets to facilitate communication within the system, enhancing user interaction and collaboration. Contributed to backend API development, including functionalities for managing user identities and file uploading using multer.
- I got to worked on another project which was an ecommerce based in which I developed backend server functionalities for an ecommerce project, focusing on user authentication to ensure secure access. Implemented CRUD operations for products, including categorization and inventory management, ensuring accurate tracking of product quantities Also developed APIs for placing orders, managing order listing with user details, integrating features such as adding to cart, listing cart.

Skills Developed: NodeJs, ExpressJs, MongoDB, Socket.io

## **Projects**

### Newspaper Management System

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 The primary goal of this project was to develop a robust web application that facilitates user and admin authentication, authorization, and CRUD (Create, Read, Update, Delete) operations for managing newspapers and PDF uploads.
 Specifically, the project aimed to create a secure login system for both admins and users, implement features like forgot password functionality with reset password links sent via email, and provide seamless CRUD operations for managing newspaper content.

## **Tagline**

Driven Junior Developer: Crafting Reliable Backends, Elevating User Experiences.

#### Skills

Javascript | NodeJs | Java | C/C++ | HTML | CSS | ExpressJs | MongoDB | MySQL | Problem Solving

#### Education

RVS College of Engineering & Technology (RVSCET), Jamshedpur

B.Tech, Computer Science Engineering (CSE) | 8.27 CGPA

2019 - 2023

## Certifications & Courses

Tata Steel (SNTI) Training Program - Java Application With MySQL Database

 It was a Summer Training/Internship provided by Tata Steel and the title for my programme was Java with MySQL

July 2022 | Certificate Link

## OS, DBMS, Computer Networking Course from Coding Blocks

 This particular certification course was mainly related to College Curriculum subjects like Operating System, Database Management System, Computer Networking

October 2021

#### Internshala Training Program

 In this training, I was able to learn about web technologies like HTML, CSS, Javascript, PHP, etc

September 2021

- Development involved utilizing Node.js and Express.js for backend development, along with technologies like Nodemailer for email functionality. Authentication and authorization were implemented using middleware functions and JSON Web Tokens (JWT) for secure user sessions. CRUD operations for newspaper management and PDF uploading were developed, ensuring efficient data management and retrieval.
- Authentication & Authorization: Implemented secure user authentication and authorization mechanisms using middleware and JWT, ensuring that only authorized users can access specific functionalities. Forgot Password Functionality: Incorporated features for users to reset their passwords by sending reset password links via email, enhancing user experience and security. CRUD Operations: Developed functionalities for Create, Read, Update, and Delete operations, enabling seamless management of newspaper content and PDF uploads. Email Integration with Nodemailer: Integrated Nodemailer to facilitate sending emails for password reset links, providing a reliable and efficient communication channel.

Skills Developed: MySQL, NodeJs, ExpressJs

## Library Management Server

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- The goal of this project was to develop a Library Management System (LMS) with a Model-View-Controller (MVC) architecture. The primary objectives included creating and implementing functionalities for managing users, books, and other aspects of library operations. The project aimed to provide a user-friendly interface for library patrons and efficient management tools for administrators or librarians.
- The project followed a structured MVC architecture, separating
  concerns into models, views, and controllers for improved
  organization and scalability. Development involved creating APIs
  for essential functionalities such as user login, logout, book issue,
  and approval of book issues by administrators or librarians. A
  session table was implemented to store user details upon login,
  ensuring security and facilitating user authentication throughout
  their session. Validations, including checks for current session
  expiry time, were integrated to enhance security and prevent
  unauthorized access.
- User and Book Management: Implemented functionalities for creating, updating, and deleting user and book records, enabling efficient management of library resources. APIs for Authentication: Developed APIs for user login and logout, ensuring secure access to the system and protecting user privacy. Book Issue and Approval: Created APIs for users to request book issues and for administrators/librarians to approve or reject these requests. Deductions from the inventory system upon book issue approval were also implemented. Session Management: Implemented a session table to store user details upon login, enabling seamless authentication and enforcing security measures such as session expiry time validations.

Skills Developed: MySQL, NodeJs, ExpressJs

#### Learning Management System

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 The project aimed to create a robust Learning Management System (LMS) backend with comprehensive user authentication, authorization, and session management functionalities to facilitate seamless online learning experiences.

- Development primarily focused on creating backend APIs using technologies such as Node.js and Express.js to handle user authentication, authorization, and session management. Emphasis was placed on security, scalability, and efficiency to ensure smooth operation of the LMS platform.
- User Authentication and Authorization APIs: Developed backend APIs for user authentication (login/logout) using secure token-based authentication mechanisms to ensure user privacy and security. User Role Management: Implemented functionalities for user role management, allowing teachers to register and select specialized subjects from a predefined list. Admin approval was required for role assignment, ensuring proper access control. Session Management: Implemented features for session scheduling by teachers, enabling them to set specific dates and maximum capacity for each session. Only students subscribed to a particular teacher or session could join, ensuring a controlled learning environment.

Skills Developed: NodeJs, MySQL, ExpressJs

## Position of Responsibility

#### Junior Software Developer

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- With this role as a Junior Software Developer primarily focused on backend development, I accomplished several significant milestones and contributions:
- Successful Implementation of Backend APIs: I developed robust backend APIs following MVC architecture, enabling seamless communication between the frontend and backend systems. These APIs facilitated various functionalities such as user authentication, file uploading, and integration with external systems.
- Enhanced User Experience: My contributions led to the implementation of key features such as real-time chat functionality within the Dentist Patient Referral System. This feature enhanced user interaction and collaboration, ultimately improving the overall user experience of the system.
- Scalable and Maintainable Codebase: By adhering to software development best practices and leveraging frameworks like Express.js, I ensured the scalability and maintainability of the backend codebase. This laid a solid foundation for future enhancements and updates to the system.
- Through my active participation in agile methodologies and collaboration with cross-functional teams, I contributed to successful delivery of project goals within set deadlines.

## Achievements/ Extracurricular Activities

- Won First Prize in Technobroad C Programming Contest in College.
- Problem Solving Certification badge at hackerrank.
- Member of College Media Club: XPECTRA, actively wrote contents for college related activities or events.
- Sports Enthusiast, actively take part in quizzes and current affairs event.