SHOVAN KARNA
FULL STACK DEVELOPER

+91 7077269397
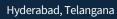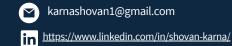Hyderabad, Telangana

karnashovan1@gmail.com
https://www.linkedin.com/in/shovan-karna/

TECHNICAL SKILLS

- Java, Python, JavaScript
- React.js, HTML, CSS
- Spring Boot, Spring Cloud, Microservices, RabbitMQ
- MySQL, PostgreSQL, Redis
- AWS, Docker, Git, GitHub
- Object-Oriented Programming (OOP), Agile Methodology,RESTful API Design,

WORK EXPERIENCE

Centre for Development of Advanced Computing [CDAC], Hyderabad
[A premier goverment R&D organization of the Ministry of Electronics and Information Technology (MeitY)]

Project Associate (May, 2023 - April, 2024)
Project Engineer(May, 2024 - Present)

Project Overview: Collaborated in the development of an enterprise Learning Management System (LMS) leveraging **Spring Boot, ReactJS, Keycloak, MySQL, and Redis**, serving a growing user base across multiple organizations.

Backend Development:

- **Custom API Gateway:** Designed and implemented a highly secure API Gateway using Spring Cloud, enabling efficient service communication and integrating functionalities such as **routing**, CORS handling, CSRF protection, **rate-limiting**, JWT-based **authentication**, and role-based access control.
- **User Progress Tracking:** Developed a robust logic layer for user activity tracking and progress management, enabling detailed insights into user engagement and interaction with the application.
- **Real-Time Reporting Engine:** Engineered a **real-time analytics** solution to process raw user interaction data, automate report generation, and deliver actionable insights through automated email notifications and frontend integration for users and administrators.
- **Feature Development:** Designed and implemented various modular components in Spring Boot, enhancing application **functionality**, **scalability**, and ease of integration with other systems.
- **Code Optimization:** Refactored critical backend services to improve **maintainability** and **performance**, **optimized API layers** to reduce service load, ensured efficient data operations, and adhered to **RESTful** standards for clarity, scalability, and future enhancements.

Frontend Development:

- **Content Delivery Interface:** Designed and developed a highly **responsive**, **modular** user interface as the core interaction point of the application, focusing on usability and seamless real-time data updates to enhance user engagement.
- **Administrative Dashboards:** Created dynamic dashboards with real-time analytics and data visualization, providing actionable insights into key performance metrics for administrators.
- **Reusable UI Components:** Built a **scalable** library of **reusable** and customizable UI components using ReactJS and React Hooks, improving development **efficiency**, **maintainability**, and feature extensibility.
- **API Integration:** Implemented robust patterns for asynchronous API communication, ensuring reliable, efficient data flow between the frontend and backend systems while maintaining performance and responsiveness.
- **Feature Development:** Delivered a variety of modular frontend features, adhering to best practices in component design and optimizing the user experience across multiple workflows.

Database Management:

- Designed optimized schemas with **relational structures** for efficient data handling
- Developed **stored procedures, views, and triggers** ensuring data integrity
- Enhanced database interactions through **Spring Data JPA** with **JPQL** and **Native Queries**

Caching Optimization:

- Implemented **Redis caching** with intelligent invalidation strategies, **reducing database load** and ensuring **data consistency.**
- Optimized frequently accessed endpoints, achieving millisecond-level response times and **improved performance**.

EDUCATION

Bachelor of Technology in Computer Science(BTech)
National Institute of Science and Technology • 2018–2022(9.01 CGPA)

Higher Secondary Examination(12th)
Sri Chaitanya Techno School• 2016–2018(82%)