Prashant Kumar

Hooghly, West Bengal

EDUCATION

Academy of Technology, Kolkata

2021 - 2025

B. Tech - Computer Science and Engineering - CGPA - 8.29

Hooghly, West Bengal

Work Experience

Testsigma — Software Engineer Intern

July 2023 - Nov 2023

- Optimized database query performance, reducing execution time by 40% through advanced query restructuring and lean object structures.
- Integrated real-time tracking with ClickUp, Azure DevOps, Jenkins, and four other tools, enhancing reporting accuracy and improving cross-functional team collaboration.
- Built 50% of open-source product for collaborative NLP-based test codes.

Technologies: SQL, React, Spring Boot, Selenium, Docker, Kubernetes, Jenkins Core Skills: Backend Development, CI/CD Integration, Test Automation, Query Optimization, Git, GitHub

Oasis Infobyte — Summer Intern

Apr 2023 - June 2023

- deployed a scalable MERN stack application, streamlining internal operations and improving overall efficiency.
- Leveraged core cloud technologies such as AWS Lambda, and S3 buckets to optimize API page handling, reducing infrastructure costs by 60% while maintaining high availability, performance and secure authentication using JWT.
- Delivered three comprehensive workshops on RESTful API design, cloud deployment, and Low-Level Design (LLD), empowering team members with practical skills in data handling and pagination to reduce server load.

Technologies: MERN Stack, AWS (EC2, S3, Lambda), Redux, REST APIs, Git, GitHub Core Skills: Scalable Architecture, Cloud Deployment, State Management, Mentoring

TECHNICAL SKILLS

- Programming Languages: Python, JavaScript, Java, SQL, C/C++, TypeScript
- Web Development: MERN Stack (MongoDB, Express.js, React.js, Node.js), RESTful APIs, Materialize CSS, HTML/CSS
- Cloud Technologies: AWS (Lambda, EC2, S3, RDS), Docker, Kubernetes
- Tools and Frameworks: Jenkins, Selenium, WebRTC, Spring Boot, Redux, CSS, WebSocket, Socket.io
- Database Management: MySQL, MongoDB
- Software Engineering Practices: Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD), Version Control (Git, GitHub)
- Other Skills: Distributed Systems, Multithreading, Query Optimization, Data Structures & Algorithms, System Design, API Design, Linux, Ubuntu
- Relevant Coursework: Database Management System (DBMS), OOPS Concept, Computer Networking, Software design Pattern, Artificial Intelligence, Operating Systems, full stack Web Development

SELECTED PROJECTS

Online Exam Portal —MERN Stack Developer () GitHub

Academic; 2 months

- Added tab-switch detection, server-side clock, and timer-based exam sections, ensuring academic integrity and helping 500+ users.
- Designed responsive interfaces with Materialize CSS, improving usability across mobile and desktop devices for 800+ browsers.

Technologies: MongoDB, Express.js, React.js, Node.js, Materialize CSS, HTML/CSS, JavaScript, Git, GitHub

WebRTC —Based Screen Sharing and Video Conferencing GitHub

Academic; 2 months

- Implemented a real-time video conferencing platform with WebRTC and WebSocket protocols, supporting multi-user video calls (up to 17 users).
- Created real-time messaging and screen sharing features using React.js, Node.js, and MongoDB.

Technologies: WebRTC, Sockets, React.js, Node.js, MongoDB, Git, GitHub, Linux

E-Commerce —Full Stack Java application GitHub

Academic; 2 months

- Built a robust full-stack web application using React for the frontend and Java Spring Boot for the backend, implementing seamless interaction between client and server.
- Designed and implemented key features like dynamic user interfaces, API integration, and state management using React. Ensured secure and efficient backend operations with Spring Boot and RESTful APIs.

Technologies: Java, Spring Boot, React, RESTful APIs, PostgreSQL, Maven, Swagger.

CERTIFICATION

- Certified in Advanced Machine Learning and Deep Learning, Completed on Infosys Springboard, covering topics like neural networks, CNNs, and real-world ML applications.
- Achieved SQL Master Certification, Solved 50+ Advanced LeetCode SQL Questions.
- Full Stack MERN Web Development Bootcamp, Udemy Completed an extensive online course covering full stack web development.

Achievements

- GCP Arcade Champion, Earned 30+ Skill Badges and Hoodie Winner (Completed in 4 Days).
- Selected for the final round of Flipkart Grid, shortlisted from over 150,000 participants, and one of 200 finalists.
- LeetCode Rating: 1900+, Demonstrated strong problem-solving skills through consistent high performance on algorithmic challenges.

INTEREST & HOBBIES

• Cricket • Photography

• Listening Music

Travelling