

Pragyanshu Rai

+91 7893153980 | pragyanshu.rai.work@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Software Development Engineer with 3+ years of experience building **scalable, reliable, and secure applications** using **Java, Spring Boot, AWS Cloud, and gRPC**. Proven track record in delivering **enterprise-grade microservices**, implementing **CI/CD pipelines**, and modernizing legacy systems with **92% cost reduction**. Strong at **problem solving, cross-functional collaboration, and agile delivery**, with an emphasis on **innovation, ownership, and system performance & reliability**.

WORK EXPERIENCE

Software Development Engineer | Hitachi Vantara | Hyderabad, India

Jun. 2022 - Present

- **Enterprise Factory Configurator (Toyota Motor Corporation)**

- Led modernization of a legacy vehicle configurator into a **microservices-based architecture** using **Spring Boot** and **gRPC servers**, improving **modularity, maintainability, and inter-service performance**.
- **Designed and implemented a gRPC server** for real-time vehicle data exchange, reducing API response latency by **30%** and enabling **scalable communication** across services.
- Coordinated with product, QA, and DevOps teams to migrate infrastructure to **AWS (RDS, ECS, ALB, Route 53, Lambda)**, reducing cost by **92%** while boosting **reliability and uptime**.
- Designed and maintained **CI/CD pipelines** (migrated from **Jenkins** to **GitHub Actions**) with rollback strategies, automated tests, and quality gates, achieving **zero-downtime deployments**.
- Embedded **security checks** and **automated validations** within pipelines to ensure compliance and reduce defects.
- Collaborated with stakeholders to translate business requirements into **HLD/LLD**, aligning technology with business goals.

- **SureTime (Surepoint)**

- Developed a **timekeeping and cost-monitoring app** with **Spring Boot**, leveraging **multithreading, Quartz, and ThreadPoolExecutor** for high-concurrency workloads.
- **Integrated gRPC APIs** alongside REST, ensuring **low-latency inter-service communication** and improving throughput for time-critical operations.
- Built **serverless workflows** with **AWS Lambda, SQS, SNS, Step Functions**, improving **reliability and scalability** of event processing.
- Worked with security and DevOps teams to embed **IAM policies and secrets management** into workflows.
- Delivered **100% automated test coverage**, improving **quality assurance** and reducing regression incidents.

Software Development Engineer - Trainee | Hitachi Vantara | Hyderabad, India

Jan. 2022 - Jun. 2022

- **Schedio (Hitachi Internal Project)**

- Directed a team of 6 interns to build a **REST + gRPC API** in **Spring Boot** for event creation and tracking, demonstrating **leadership, mentoring, and collaboration**.
- Designed **gRPC endpoints** for fast event lookup and updates, reducing query execution time for concurrent requests.
- Formulated a **high-level design** outlining the database relations to ensure data **normalization** and **minimize redundancy**.
- Achieved enhanced optimization through the adoption of **indexing** and **connection pooling** achieving **30% faster queries**.
- Conducted **training workshops** to teach interns **Spring Boot, database optimization, and CI/CD best practices**, fostering a **culture of continuous learning**.

● **Prakya 360**

- Built a **report generation module** using **Apache POI** and **iText** in **Java**, exporting reports in **PDF/Excel**.
- Applied **SOLID** and **DRY** principles, improving **code quality and maintainability**.
- Automated testing and recurring tasks with **Bash scripts**, improving **team productivity**.
- Optimized runtime performance with efficient **data structures (Sets, Maps)** for handling large datasets.

TECHNICAL SKILLS

| | |
|------------------------------------|--|
| Languages: | Java , JavaScript (Node), HTML, CSS, Bash |
| Framework and Tools: | Spring Boot , gRPC , React, Docker, Git, Github Actions |
| Database: | MySQL , PostgreSQL |
| Cloud Platforms and Others: | AWS (EC2, Lambda, RDS, SQS, SNS, S3, Route 53, ECS, ALB) |
| Architectures: | Microservices (Database per service, Circuit Breaker, Orchestrator) |
| Concepts: | Multithreading , High-Level Design, Low-Level Design, DSA, CI/CD |

CERTIFICATION

| | |
|--|----------|
| <u>AWS Certified Developer - Associate</u> | Apr 2024 |
| <u>HackerRank Certified Problem Solving</u> | Apr 2024 |

EDUCATION

| | |
|--|----------------------|
| B-Tech in Computer Science | Jul. 2018 - Apr 2022 |
| School Of Technology, GITAM, Hyderabad | GPA: 8.4/10 |