

Ritvik Kumar Panchhaiya

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EDUCATION

George Washington University | Master's in Computer Science **Washington, DC, USA** | Aug 2025 – Present
Sikkim Manipal Institute of Technology | B.Tech in Information Technology, GPA: 8.94 **Sikkim, India** | 2018 – 2022

SKILLS

Languages: Java, Go, Python, JavaScript, TypeScript | **Frameworks:** Thymeleaf, Spring Boot, Hibernate, ReactJS, NextJS | **Databases:** MySQL, MS SQL Server, Oracle SQL Developer | **Tools & Technologies:** Git, Maven, Jenkins, Docker, Kubernetes, Bitbucket, LLM

WORK EXPERIENCE

ACCENTURE | Software Engineer Analyst

Hyderabad, India | Oct 2022 – Jul 2025

- Engineered Spring Boot **microservices** for a major U.S. bank's payment system processing 300K - 400K transactions daily, reducing latency by 35% and ensuring 99.9% uptime.
- Designed and deployed **RESTful APIs** with robust validation and exception handling, achieving 99.99% transaction accuracy across distributed modules.
- Automated **CI/CD pipelines** using **Jenkins**, **Maven**, and **Bitbucket**, cutting deployment time by 40% and eliminating manual release errors.
- Containerized services with **Docker** and deployed on **Kubernetes** clusters, improving scalability and environment consistency by 25%.
- Collaborated with cross-functional QA, DevOps, and Product teams in **Agile** sprints, maintaining sprint velocity above 95% and improving release frequency.
- Built secure web modules with **Spring Boot**, **Hibernate**, and **JSP**, implementing role-based authentication and responsive admin dashboards.
- Optimized database queries and schemas, improving data-retrieval performance by 25%.
- Completed Accenture's Java Full-Stack Training Program and delivered a full e-commerce capstone project, demonstrating end-to-end development using modern frameworks.

AGILITE GLOBAL SOLUTIONS COMPANY, LLC | Software Development Intern

Remote | Feb 2022 – Jun 2022

- Developed a multi-layered **enterprise application** using **ASP.NET Core**, **C#**, and **SQL Server**, applying **SOLID principles** and the Repository pattern to improve modularity and maintainability.
- Optimized database interactions with **Entity Framework** and parameterized SQL queries, reducing data retrieval time by 30% and improving overall system responsiveness.
- Collaborated with senior engineers to implement **RESTful APIs** and **Blazor** based UI components, enabling seamless integration between frontend and backend services in a scalable architecture.

PROJECTS

GoLlama, Distributed LLM inference system built in Go

- Architected a distributed **LLM inference system** in Go using a **hub-and-spoke model**, enabling horizontal-scaling of llama.cpp workers to handle high-volume chat, summarization and translation requests without reliance on external paid APIs.
- Engineered a fault-tolerant worker pool with round-robin load balancing, automatic health monitoring and a robust retry mechanism, ensuring high availability and optimal resource utilization across distributed nodes.
- Developed secure **RESTful APIs** exposing endpoints for inference and worker management with **JWT authentication** and a concurrent job-queue system, complemented by comprehensive load and chaos testing to ensure high-performance, fault-tolerant and production-grade stability.

Simran Graphics, An online portfolio website for a graphic design and printing company | simrangraphics.in

- Created a **responsive** portfolio website using HTML, CSS, **JavaScript**, **Node.js**, and **React.js**.
- Enhanced user experience and accessibility, leading to a 20% increase in client inquiries.
- Integrated a **user-friendly** feedback form, enabling potential clients to submit inquiries and requests for quotes.

Bookstore Website, An online web application to buy and sell books

- Constructed a full-fledged e-commerce website with **Java**, **Servlets**, **JSP**, and **Hibernate**.
- Implemented a secure, **user-friendly** front-end interface for customers, featuring functionalities such as browsing, searching, purchasing books and reviewing orders.
- Designed a dedicated back-end **admin portal** for managing users, books, categories, orders and reviews, ensuring efficient administration and control.