Gaurav Raisinghani

EDUCATION

Arizona State University

Master of Science - Computer Science

August 2024 - Dec 2025

CGPA: 3.89/4

•SRM Institute of Science and Technology

June 2017 - May 2021

Bachelor of Technology - Computer Science and Engineering

CGPA: 9.23/10

TECHNICAL SKILLS AND INTEREST

Programming Languages: Python, Java, C, C++

Frameworks & Tools: Spring Framework, Hibernate ORM, Java Persistence API, Spring Cloud Gateway, JUnit Testing, Google Cloud Platform, Feign, Kafka, Web Services, Git Version Control.

Web Development: HTML, CSS, JavaScript, D3.js, Web Applications, RESTful APIs, API Design and Development, Microservices Architecture, Web Sockets, Server-Side Rendering, Servlets, JSP.

Databases: SQL(Oracle), NoSQL(MongoDB)

Software Development: Data Structures and Algorithms, Object-Oriented Programming (OOP), Multithreading and Concurrency, Lambdas and Streams, Test-Driven Development, Design Patterns, Java Memory Management, Authentication and Authorization.

Agile Methodologies: Code Review, Code Deployment, Automation Testing, Agile Project Management (Jira, Confluence), Monitoring (Splunk, Kibana, Datadog, PagerDuty)

EXPERIENCE

•Quinbay

February 2024 - July 2024

Senior Software Engineer

Bengaluru, India

- Led the development and maintenance of **backend services** for **Digital products** and **TMS**, elevating performance and scalability by 30%.
- Guided and mentored junior developers, promoting best practices in coding, software design, and development methodologies.
- Oversaw **feature development** and setup of new **microservices**, coordinating with **cross-functional teams** to ensure timely and successful delivery.
- Implemented Agile methodologies and utilized the Atlassian suite (Jira, Confluence), Splunk, and Kibana for effective project management, tracking, and monitoring, minimizing downtime by 25%.
- Managed **relational (Oracle, SQL)** and **non-relational databases (MongoDB, NoSQL)** to support diverse application requirements and optimize performance.
- Implemented Spring Cloud Gateway for TMS, enhancing API traffic management, security, and system efficiency. Integrated the gateway to improve load balancing and routing, ensuring seamless functionality across backend systems.

Quinbay

July 2021 - February 2024

 $Software\ Developer$

Bengaluru, India

- Contributed to **feature development** and setup of new **microservices**, coordinating with **cross-functional teams** to ensure timely and successful delivery.
- Successfully implemented product schema markup for digital products, improving search engine visibility and enhancing SERP appearance boosting click-through rate (CTR) by 15%.
- Utilized server-side rendering techniques to efficiently generate and serve structured data to Google crawlers.
- Collaborated with **product** and **marketing** teams to optimize **schema markup** for maximum impact on **search engine rankings and user experience**.
- Incorporated **Splunk** and **Kibana** for real-time insights, enabling **rapid issue resolution** and bringing down **incident response time** by 40%.

Quinbay

January 2021 - July 2021

 $Software\ Developer\ Intern$

Bengaluru, India

- Developed and maintained microservices using Spring Boot, Feign, Kafka, and REST templates.
- Contributed to end-to-end **feature development** and **architecture setup** of **distributed systems**.

•HCL Technologies Ltd

June 2019 - June 2019

Summer Intern Noida, India

Successfully integrated Google Maps API's, providing advanced mapping capabilities and enhancing user experience.

- Designed and implemented a **buffer tool** for **spatial analysis**, allowing users to create and analyze buffer zones around geographic features, improving analytical efficiency by 25%.
- Collaborated with cross-functional teams to ensure seamless integration and functionality within the web application.

•Bharath Electronics Limited

November 2018 - December 2018

Intern

Ghaziabad, India

- Developed a user-friendly Human-Machine Interface (HMI) for Gas Turbine Generator, revising operational efficiency and control and decreasing existing lag by 10 %.

PROJECTS & PUBLICATIONS

•Interactive Data Visualization with D3.js

February 2025 - February 2025

Arizona State University

Arizona, USA

- Developed an interactive lollipop chart using D3.js, HTML, and CSS, incorporating smooth animations and responsive design for improved user engagement.
- Leveraged **D3.**js data binding to dynamically map data to **DOM elements**, enabling **real-time updates** and seamless interactivity.
- Optimized the visualization for large datasets with features like tooltips, zooming, and cross-browser compatibility, ensuring **high performance** and **usability**.

Privacy-Preserving Health Insurance Analytics

August 2024 - December 2024

Arizona State University

Arizona, USA

- Designed a secure data system where sensitive information stays **encrypted at all times**, even while being processed, using technologies like OAuth 2.0, Kafka, and AES-256 encryption.
- Built smart ways to check and detect fraud without ever revealing the actual data, using homomorphic encryption and privacy-focused AI models.
- Suggested using federated learning (training models without moving data) and blockchain-based logs to keep a **secure and trackable record** of everything that happens.

•Spring Cloud Gateway Middleware for TMS Quinbay

February 2024 - July 2024

Bangalore, India

- Designed and managed an efficient API Gateway to handle and route traffic across microservices.
- Reduced **latency** and improved **response times**, enhancing **user experience** and **system responsiveness**.
- Achieved a 25% improvement in backend performance through streamlined request handling and traffic optimization.

•Rich Results Implementation for Digital Products

October 2023 - February 2024 Bangalore, India

Quinbay

- Collaborated with **product** and **marketing teams** to revamp and optimize **schema markup** for SEO performance.
- Increased click-through rate (CTR) by 15% and improved search rankings by 30% through targeted schema enhancements.
- Implemented server-side rendering to deliver structured data efficiently, reducing load times by 20% and improving user engagement.

Parkinson Patient Device

July 2021 - March 2021

SRM Institute of Science and Technology

Chennai, India

- Research paper published in the Turkish Journal of Physiotherapy and Rehabilitation, presenting a symptomatic approach for monitoring Parkinson's disease patients.
- Journal Details: Turkish Journal of Physiotherapy and Rehabilitation, ISSN 2641-4451

Architectural Design of GIS and HMI for GTG

November 2018 - December 2018

Bharath Electronics Limited

Ghaziabad, India

- Gained hands-on experience with Geographic Information Systems (GIS) and integrated SPAT-GIS sensors with a web-based interface.
- Designed and implemented a responsive **HMI** to **monitor** and **control** turbine operations effectively.
- Improved system stability, reliability, and user experience through thorough testing and iterative design enhancements.

NOTABLE TECHNICAL ARTICLES

- Explored the landmark computer science problem in "Is P = NP? The Million-Dollar Question Reshaping Computer Science" (Medium, Feb 2025).
- Delivered an expert guide on crafting interactive visualizations in "Transforming Data into Dynamic Narratives with **D3.js**" (Medium, May 2025).
- Authored a widely-read tutorial on API traffic management with "Implementing Spring Cloud Gateway: A Comprehensive Guide" (Medium, Jul 2024; 6,000+ readers).