

VARISH KHAN

Software Development Engineer | M.Tech (AI/ML)

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PROFESSIONAL SUMMARY

M.Tech candidate in Artificial Intelligence & Machine Learning with a strong foundation in Computer Science (B.E.). Core expertise lies in **Backend Engineering** (Java, Spring Boot) and **Data Structures**. Committed to **bridging the gap** between robust backend systems and intelligent AI solutions. Proven ability to leverage efficiency-first methodologies to optimize database performance and build scalable architectures.

TECHNICAL SKILLS

- **Languages:** Java (Core/Advanced), Python, C++, SQL, JavaScript.
- **Web Development:** Spring Boot, RESTful APIs, Servlets, JDBC, React.js, JUnit.
- **AI & Machine Learning:** GenAI Integration, Prompt Engineering, Pandas, NumPy, Scikit-learn.
- **Tools & Platforms:** Git, GitHub, Maven, Postman, MySQL, Docker, VS Code.
- **Core Competencies:** Data Structures & Algorithms, Object-Oriented Programming (OOP), System Design, SDLC.

PROJECTS

Student Management System | Java, JDBC, MySQL

- Architected a robust desktop application using **Java** and **JDBC** to manage student records, validating system reliability with **JUnit** test cases.
- Designed a normalized **MySQL database schema**, ensuring data integrity and reducing redundancy through optimal relationship mapping.
- Optimized SQL queries and database indexing, resulting in a **30% improvement in query performance** for large datasets.

AI-Enhanced Online Quiz Platform | Java, JavaFX, REST APIs

- Developed a dynamic, timer-based quiz application using **Java/JavaFX** with real-time leaderboard functionality via **RESTful APIs**.
- Integrated **Generative AI APIs** to dynamically generate diverse question banks, automating content creation and ensuring unique test scenarios.
- Implemented **Object-Oriented Programming (OOP)** principles like Inheritance and Polymorphism to handle various question types seamlessly.

Personal Portfolio Website | React.js, HTML, CSS

- Built a fully responsive portfolio from scratch using **HTML**, **CSS**, and **JavaScript** to showcase technical projects and skills.
- Implemented agile workflows using **Git/GitHub** for version control, ensuring clean code commits and effective repository management.
- Executed **Code Refactoring** on legacy components to improve page load speed and maintainability by **25%**.

EDUCATION

Master of Technology (M.Tech) in Artificial Intelligence & Machine Learning

Oriental Institute of Science and Technology, Bhopal

2024 – Present (Expected 2026)

Bachelor of Engineering (B.E.) in Computer Science & Engineering

Rabindranath Tagore University, Bhopal

2019 – 2023 | CGPA: 8.41

Intermediate (Class XII) | Govt. Subhash HS School for Excellence (MP Board)

68.4%

Matriculation (Class X) | Govt. Subhash HS School for Excellence (MP Board)

76%

CERTIFICATIONS & ACHIEVEMENTS

- **Certifications:** Full Stack Java Development (In Progress), Java & DSA, Git & GitHub Version Control.
- **Problem Solving:** Active practitioner on **LeetCode**, solving complex **DSA** problems focused on backend optimization.