ABHISHEK SINGH

in **LinkedIn** | 📱 219-455-5817 | 🌐 **Portfolio** | ✉ sing1290@purdue.edu | ○ **GitHub**

Skills

- Java | C# | JavaScript | Python | C++ | C | MongoDB | SQL | Cassandra | Node | Express | React | Next | Recoil | Spring | NoSQL | Git
- Azure | AWS | Kubernetes | CI/CD | Docker | EIP | OpenTelemetry | Kafka | Camel | Freemarker | Google Pub/Sub | Markdoc | ML | GenAI
- Microservices | Distributed Systems | Frontend | Backend | Full-Stack | English, Hindi – *All professional proficiency or above*

Experience

Software Engineer Intern   **Scope Retail**   *Bentonville, AR, USA*   **08/2024 - current**

- Improved system interoperability and efficiency, achieving seamless integration of 500+ systems across 200+ use cases by implementing 30+ Enterprise Integration Patterns using Apache Camel, Freemarker, and Google Cloud technologies.
- Enhanced operational insights by deploying OpenTelemetry to instrument 50+ Dockerized microservices, integrating Loki, Tempo, and Grafana for advanced log and trace visualization.
- Boosted user comprehension by documenting product guides and demos with Markdoc, Next.js, and TailwindUI.
- Streamlined warehouse management by developing cross-platform apps using React and React Native, ensuring real-time data access.

Data Scientist and Software Developer   **Purdue University**   *Hammond, IN, USA*   **01/2024 - 05/2024**

- Proposed deployment of a Gunshot Detection System for 150+ buildings across 4 campuses, designing the software using React.js, Python, Express.js, and SQL, thereby enhancing campus safety initiatives.
- Improved risk analysis of mass shootings by developing models analyzing 20+ data features, leveraging data mining and machine learning algorithms to derive actionable insights.
- Increased railway safety by building a YOLOv8 model that classified rail defects in real-time with 95% accuracy, trained on 3,000+ images, and received commendation from a major railway company.

Associate Software Engineer   **Scopesys Innovation**   *Pune, MH, India*   **11/2022 - 08/2023**

- Processed $10M+ monthly transactions by building COSMOS, an Order Management System, using Java, Spring Boot, SQL, and Kafka to optimize order fulfillment workflows.
- Boosted warehouse efficiency by 40% through UNITI, an inventory management system designed with Cassandra, Spring JPA, and RestController, revolutionizing stock visibility across clients.
- Minimized downtimes by 30% via code enhancements and scalability optimization with Spring Cloud, Azure, Docker, and Kubernetes, ensuring robust software performance.

Education

Master of Science   **Purdue University Northwest**   *Hammond, IN, USA*   **08/2023 - 05/2025**

- Major in Computer Science - GPA: 3.86

Projects

- **SharePrompt:** Developed with **Next.js**, **MongoDB**, and **TailwindCSS**, this sleek AI prompt-sharing web app features a modern glassmorphism design, allows users to manage AI prompts, access profiles, and utilize quick links to popular AI apps. With features like "Copy to Clipboard," tag-based search, and secure Google login using **NextAuth**, it ensures a seamless user experience on any device.

- **SentinelSafe:** Built using **React.js** and **Recoil**. It showcases a risk assessment model to enhance school safety, utilising a dataset of 50 schools impacted by mass shootings, incorporating over 300 satellite images and 500 data points. Trained on **CNN** and **deep neural networks,** the model **assesses mass shooting risks** in schools with **85% accuracy**, providing proactive threat mitigation measures.

Mentorship

- Instructed 100+ undergraduate students in Java programming, fostering an understanding of core concepts and best practices.
- Conducted workshops on version control using Git, empowering students with essential collaborative software development skills.

Others

- Certified as an **Oracle Cloud Infrastructure** 2024 Generative AI Professional
- Certified Java, Springboot and Hibernate Developer (By Hackerrank and Udemy)
- Achieved **88th global rank** in a CodeChef coding competition