BHUVAN RAJPOOT

United Kingdom • (+44) 7741528220 • bhuvanrajpoot.codes@gmail.com • LinkedIn • Github

PROFESSIONAL SUMMARY

Software Engineer with an MSc in Advanced Computer Science and experience building scalable backend and full-stack systems across microservices, cloud-native infrastructure, and real-time applications. Delivered production-grade platforms achieving 99.9% uptime and sub-100ms latency supporting 10+ concurrent users, independently owning features end-to-end from architecture to deployment using Java, Spring Boot, Node.js, and AWS. Strong collaborator with proven Agile delivery experience and a drive to build systems that perform under real-world load.

KEY SKILLS

Programming & Languages	Java, JavaScript, TypeScript, Python, C/C++, Groovy, OOP, Data Structures & Algorithms
Backend & Architecture	Spring Boot, Node.js, Flask, Django, Microservices, REST APIs, GraphQL, Kafka, gRPC, Apache NiFi, Distributed Systems
Cloud & DevOps	AWS (Lambda, SQS, SNS, VPC, EC2), Docker, Kubernetes (HPA, StatefulSets), OpenStack, CI/CD (GitHub Actions, Jenkins)
Databases	MySQL, PostgreSQL, MongoDB, Elasticsearch, Aerospike, JPA, Query Optimisation, Caching, Indexing
Frontend & Tools	React.js, Next.js, HTML5, CSS3, Git, Postman, JUnit, Jest, Cypress, Linux

WORK EXPERIENCE

Learn and Build (India), Full Stack Developer Intern **May 2023 - July 2023**

- Architected a scalable voting application backend using Spring Boot microservices and MongoDB, applying clean architecture principles and achieving 99% system uptime by designing modular service boundaries and robust fault-handling logic that isolated failures without cascading across the system.
- Optimised database performance through indexing and caching strategies, reducing query latency by 15% and supporting concurrent loads of 500+ simultaneous votes by restructuring schema relationships and applying in-memory query caching to eliminate redundant database hits.
- Secured the platform by implementing Spring Security, JWT, and OAuth 2.0, enforcing role-based access control and eliminating unauthorised access vectors across all API endpoints to ensure data integrity and user trust at every layer.
- Engineered RESTful APIs for real-time vote casting, result aggregation, and user management, improving application responsiveness by 20% through async processing and optimised endpoint design that reduced unnecessary blocking under concurrent load.
- Collaborated within Agile sprint cycles, participating in code reviews and retrospectives and delivering all assigned features on time with zero critical defects raised in production, demonstrating consistent reliability and strong communication across the team.

Parangat Technologies (Noida, India), Software Developer Intern **June 2022 - September 2022**

- Revamped the HealthyBazar e-commerce platform frontend using React.js and Next.js, implementing code-splitting and lazy loading to reduce page load time by 30%, improving user retention and consistency across all major browsers and device types.
- Boosted Core Web Vitals scores by 25% by applying memoization, virtual scrolling, and asset optimisation across high-traffic pages, directly improving user experience and SEO ranking by reducing render-blocking resources and unnecessary re-renders.
- Developed responsive, mobile-first interfaces using HTML5, CSS3, and Bootstrap, enforcing cross-browser compatibility and meeting WCAG accessibility standards to ensure a consistent and accessible experience across all device form factors.
- Contributed to 5+ Agile sprint cycles with cross-functional teams through pair programming and peer code reviews, maintaining high code quality and reducing post-merge defects by catching issues early and aligning closely with backend teams on integration dependencies.
- Took end-to-end ownership of UI components from design handoff to production deployment, demonstrating strong initiative and accountability by delivering every assigned feature on time with minimal supervision and zero critical issues post-deployment.

EDUCATION

University of Leicester, Master of Science (MSc), Advanced Computer Science **September 2023 - January 2025**

Coursework: Cloud Computing, Service-oriented Architecture, Advanced Web Technologies, Mobile and Web Development, Agile Cloud Automation

Sanskar College of Engineering and Technology, Bachelor of Technology (B.Tech.), Computer Science and Engineering **August 2018 - May 2022**

Coursework: Computer Networks, Operating Systems, DBMS, Data Structures, Design and Analysis of Algorithms, Artificial Intelligence, Machine Learning

CERTIFICATIONS

- **AWS Certified Developer - Associate (In Progress)**
- **Python Programming**
- **Backend Web Development - Devtown Bootcamp**
- **JavaScript, HTML5 and ES6 - Udemy**
- **C/C++ Programming - Nextwing Infotech Pvt. Ltd**

PROJECTS

Job Advertisement Platform - Node.js, Express, GraphQL, Elasticsearch **September 2024**

- Built a scalable job aggregation platform serving 4,000+ job listings using Node.js, GraphQL, and Elasticsearch, achieving search response times of under 50ms and handling 1,000+ daily updates with zero downtime through custom analysers and SSL/TLS secured endpoints.

Distributed Whiteboard Application - Node.js, Socket.IO, Docker, Kubernetes, Paxos, OpenStack **December 2023**

- Engineered a real-time collaborative whiteboard supporting 10+ concurrent users with sub-100ms latency using *WebSocket-based communication, operational transformation algorithms, and Docker on AWS EC2*, achieving 99.9% uptime and horizontal scalability for 50+ concurrent sessions.

WordPress Plugin Scaffolding DSL - Java, Groovy, Xtext, EMF **December 2023**

- Designed a *domain-specific language (DSL)* using *Xtext and Groovy* to automate WordPress plugin scaffolding, reducing developer setup time by 70% by generating complete plugin boilerplate - activation scripts, widgets, shortcodes, and hooks - from concise declarative definitions.

Patient Readmission Prediction System - Python, Pandas, Scikit-learn, NumPy **March 2024**

- Developed a machine learning system to predict 30-day hospital readmission risk across 100K+ patient records, achieving ~82% accuracy and 0.78 F1-score using Logistic Regression, K-Means clustering, and SMOTE-based class balancing on 50+ clinical features.