

Bibek Kumar Sah

Software Engineer

Software Engineer with 3+ years of experience in the .NET ecosystem, specializing in secure web application development, vulnerability assessments (VAPT), and database optimization. Ensuring integrity, delivering innovative solutions, and eager to contribute to agile teams and thrive in fast-paced, growth-oriented environments.

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TECHNICAL SKILLS

Languages: C#, Node.js, Java, Python
Frameworks & Tools: .NET Core, API Design, .NET Framework, React, Playwright, SonarQube, Postman, NUnit, GitLab, Git, Jenkins, Svn, Docker, Azure Services, AWS EC2, S3, IAM, IIS
Database Management: Microsoft SQL Server, PostgreSQL
Security Tools: Burp Suite, SQLMap
Core Concepts: Data structures, Algorithms, Problem Solving, Optimization Techniques

WORK EXPERIENCE

Darvilab Pvt. Ltd.

Dec 2025 - Present
Kathmandu, Nepal

Software Engineer

- Developed and implemented an Exam Proctoring Service: Created a robust exam proctoring feature for the learning management system (LMS), ensuring secure, real-time monitoring of online exams. Integrated AI-based solutions to detect suspicious activities and prevent cheating during remote assessments.
- Built a CDN for Seamless Video Streaming: Architected and deployed a Content Delivery Network (CDN) to support smooth, scalable video streaming for online courses and live sessions. Enhanced video delivery performance, reduced latency, and improved the overall user experience across multiple devices and regions.
- Built and enhanced dynamic, component-based user interfaces using React, improving application responsiveness and user experience.

Version Systems Pvt. Ltd.

Jul 2023 - Aug 2025
Rajkot, Gujarat, India

Software Engineer

- Conducted Vulnerability Assessment and Penetration Testing (VAPT) aligned with the OWASP security best practices. Identified and successfully mitigated critical security issues including Cross-Site Scripting (XSS), SQL Injection, and Insecure Deserialization in web applications. Collaborated with developers to remediate flaws and harden applications against exploitation.
- Developed and maintained enterprise-level web applications using ASP.NET Core and ASP.NET Framework.
- Designed, optimized, and maintained relational databases using Microsoft SQL Server.
- Built and enhanced dynamic, component-based user interfaces using JavaScript and React, improving application responsiveness and user experience.

PROJECTS

Retirement Benefits

- Identified and successfully mitigated critical security issues including Cross-Site Scripting (XSS), SQL Injection, and Insecure Deserialization in web applications. Collaborated with developers to remediate flaws and harden applications against exploitation.
- Developed key features of a retirement benefits management system including OCR using ASP.NET Core and Microsoft SQL Server, contributing to core business logic and database functionality.
- Implemented and fine-tuned Web Application Firewall (WAF) rules to prevent malicious traffic and enforce HTTP security policies.
- Engineered core modules of retirement benefits system utilizing ASP.NET Core and Microsoft SQL Server, enhancing data processing speeds by 20-25% and streamlining benefit calculations for 5,000+ users.
- Collaborated to align technical implementation with business requirements and security standards.

DevOps Automation & SCM Migration

- Led the end-to-end migration from traditional SVN to a self-hosted GitLab server, improving version control reliability and team collaboration.
- Configured Jenkins pipelines and integrated SonarQube for static code analysis and code quality enforcement, designing and implementing a robust CI/CD pipeline that improved release workflow efficiency by 40% through automation and continuous integration practices.
- Contributed across teams to align security, performance, and business objectives in all development workflows.

INTERNSHIP

Elite Techno Groups
Intern (Python for AI/ML)
Aug 2021 - Sep 2021
Remote, India

Conducted data preprocessing, feature engineering, and model evaluation to enhance prediction accuracy and ensure high-quality results for AI/ML projects.

EDUCATION

B.Tech (Computer Engineering)
RK University
CGPA **9.15** (Out of 10)
2020-2024
Rajkot, India

Higher Secondary (Science)
Sagarmatha Secondary School
CGPA **3.29** (Out of 4)
2018-2020
Siraha, Nepal

CERTIFICATES

Foundational c# with Microsoft
Microsoft
Oct 2024

Fundamentals of Information Security
Infosys
Nov 2022

Develop Soft Skills that Industry Demands
TCS
Dec 2022

Introduction to Networks
Cisco
Jan 2023

Ethical Hacking
One Byte Labs
Jan 2023

ACHIEVEMENTS

Mobile-Code-e-Thon Hackathon
2nd Rank (University Level)
organized by **RK University** & **Gateway Group of Company**
2022
RK University