BINOD RASAILI

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SOFTWARE DEVELOPER

Experienced Software Developer with over 10 years of expertise in delivering scalable, enterprise-level applications, including 6 years specializing in Java technologies. Expertise in architecting and designing several large scale projects such as Financial Risk Assessment, Revenue and Tax systems leveraging PostgreSQL, MySQL, Apache Kafka, Docker, and Kubernetes. Proficient in Java Spring Boot, React.js, and CI/CD pipelines as well as well-versed in AWS cloud services and SDLC methodologies, focusing on testing, debugging, and performance optimization.

Web services • Database design • Containerization • Object Oriented Programming (OOP) • Microservices

Design Patterns • Agile/SCRUM • Cloud Computing • CI/CD • System Design

Languages: Java, JavaScript, C++, C#

Web: HTML, HTML5, CSS, React.Js, Node.js, Bootstrap **Web Services:** RESTful API, microservices, JSON **Web/App Servers:** Tomcat, Express, Node.js

Frameworks: Spring, Spring Boot, Node.js Express, Swagger

Databases: MySQL, Postgres SQL

Design Patterns: Creational(Factory Method, Builder, Prototype, Singleton), Structural (Adapter, Bridge, Decorator,

Proxy), Behavioral(Observer, Template method, Command, Chain of Responsibility)

SDLC: Agile/Scrum, Rational Unified Process (RUP), Waterfall, Kanban

Tools: Maven, IntelliJ Idea, MS VS Code, Git, Kafka, Docker, Jira, Kubernetes

Platforms: Windows, Linux, AWS

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

NAMOBUDDHA MUNICIPALITY, Kavrepalanchok, Nepal • 06/2019 - 01/2024

Namobuddha Municipality is the local government authority dedicated to serving the community.

Sr. Software Developer

Developed and maintained Tax Management System.

- Developed a web-based Tax Returns SPA using Java Spring Boot, ReactJS, HTML, and CSS that boosted taxpayer accuracy by 30% and significantly streamlined municipal staff training as well as taxpayers' convenience.
- Implemented advanced reporting and risk assessment features using Java Spring Boot, Jasper Reports, and PostgreSQL, leading to a 40% increase in accuracy, efficiency, and timeliness of financial reports for decision makers.
- Spearheaded the design and development of an electronic payment system integrated with banking APIs, reducing payment errors by 20% and ensuring real-time updates.
- Integrated code weekly into the CI/CD pipeline using Git, Docker, and Kubernetes, enhancing code stability and reliability, while improving scalability and orchestration, contributing to a smoother development cycle and faster feature deployment.
- Developed a token management system for a Kiosk Machine using Visual C++, automating the token printing process and reducing wait times by 40%.
- Refactored SQL queries and improved pagination logic to cut processing times by 50% and enhance system performance under high user loads.
- Successfully migrated large datasets to AWS Cloud, reducing infrastructure costs by 60% and increasing system availability and disaster recovery capabilities.

<u>Technologies Used:</u> Java, Spring Boot, HTML, CSS, JavaScript, React JS, Visual C++, embedded C++, Docker, Kubernetes, AWS, CI/CD, Jasper Reports, Kafka

DEPARTMENT OF CUSTOMS, GOVERNMENT OF NEPAL, Kathmandu, Nepal • 09/2018 - 06/2019

The Department of Customs of Nepal is an administration of the Government of Nepal under the Ministry of Finance.

Software Developer

Localized the Custom management System of World Custom Organization.

- Collaborated with UNCTAD experts to ensure the smooth operation of the ASYCUDA World system across all
 customs offices in Nepal which significantly improved customs management efficiency and enabled more
 effective trade data analysis.
- Refined and synchronized HS codes using Java, enhancing classification accuracy and expediting foreign trade processing. This contributed to improved compliance with international trade regulations.
- Leveraged ASYCUDA's proprietary tools, Linux, and Oracle 9i to maintain and optimize the system's functionality. Ensured adherence to international standards and facilitated efficient EDI between traders and customs authorities.
- Applied TDD to develop a RESTful HTTP Client in Java. Reduced API call-related exceptions by 45%, improving system reliability and enhancing user satisfaction
- Refactored legacy code in the ASYCUDA World system using Java and Spring Boot. Enhanced maintainability and reduced system downtime by 20%, leading to more seamless operation and improved user satisfaction.

Technologies Used: Java, Spring Boot, HTML, CSS, JavaScript, CI/CD, Jasper Reports, XML, Oracle, Linux

LARGE TAXPAYERS' OFFICE AND INLAND REVENUE OFFICE, Kathmandu, Nepal • 09/2014 – 09/2018

Large Taxpayers Office and Inland Revenue Offices are Offices under Inland Revenue Department.

Software Developer

Designed systems and databases, engaged in full stack development

- Contributed to the design and development of a risk-based audit system utilizing enterprise-level technologies such as Java, HTML, and CSS. This system effectively pinpointed high-risk areas in tax collection and provided actionable insights for tax officers, leading to more targeted and comprehensive audits.
- Developed an intranet website using HTML, CSS, and JavaScript, incorporating robust server-side processing with enterprise technologies to enhance internal communication among employees. Features included notices, circulars, project plans, and blogs, which improved information flow and fostered better team collaboration
- Designed, tested, and deployed an advanced report generation system using enterprise-level technologies including Java, HTML, and CSS, which streamlined the reporting process and reduced tax audit time by 50%, significantly enhancing operational efficiency.
- Integrated an SMS API with enterprise solutions for automated messaging, facilitating timely communication with stakeholders and enhancing the effectiveness and responsiveness of notifications.

Technologies Used: Java Servlet, HTML, CSS, JavaScript, JSP, PostgresSQL, MySQL

INLAND REVENUE DEPARTMENT, Kathmandu, Nepal • 09/2012 - 09/2014

The Inland Revenue Department Nepal is the department of the Nepal Government under the Ministry of Finance.

Software Developer

Developed and integrated a comprehensive tax information system, migrating legacy platforms to ASP.NET <u>Technologies Used:</u> C#, .NET Framework, MS Visual Studio, Oracle 9i, Windows Server 2003, Java Swing, ASP.NET, PHP. HTML, CSS

RELEVANT PROJECTS

Maharishi International University (2024) Flight Management System: A full-stack flight management system was developed using Java Spring Boot (backend) and React.js (frontend), with Docker for deployment, Kubernetes for orchestration, and CI/CD managed via GitHub Actions. Utilized Java Spring Boot, React.Js, PostgresSQL, HTML, CSS, Bootstrap, Docker, Git, Github Action.

Library Management System 2024: You developed a comprehensive library management system using Node.js Express for the backend, PostgreSQL as the database, and JavaScript, HTML, and CSS for the frontend, ensuring a robust and user-friendly interface. Utilized JavaScript, Nodejs, Node express, PostgresSQL

EDUCATION

Masters in Computer Science

(In progress via distance education; expected completion 10/2026)

Maharishi International University, Fairfield, Iowa

<u>Key Courses</u>: Enterprise Architecture, Web Application Architecture, Software Engineering, Web Application Programming

Bachelors' in Computer Science in Computer Science

Amrit Science Campus, Kathmandu, Nepal