

LANGUAGE AND TECHNOLOGIES

- **Languages:** JAVA, Python, Node, C, C++
- **J2SE/J2EE Technology:** Multithreading, Reflections, Collections, Serialization, Networking, Beans, Annotations, JDBC, Hibernate, JSP, Servlets, Java Swing, JavaBeans, JUnit
- **Tools:** Maven, Gradle, Postman, Visual Studio Code, Git, Bitbucket, Atlassian JIRA/Confluence, SonarQube, IntelliJ, Eclipse
- **Web:** JavaScript, Bootstrap, JSON, PHP, AJAX, HTML5, CSS3, AWS, Angular
- **Databases:** MySQL, PostgreSQL, Oracle, SQLite, MongoDB
- **Web Servers:** Tomcat, JBoss, AWS
- **Design Patterns:** Database Access Object Factory, Singleton, Adapter Design Pattern, Business Object

PROFESSIONAL EXPERIENCE

Capitol Indemnity CORP | Python/ AWS/ Java Developer | Remote **Jun 2021 - Present**

- Developed HubCap, a multi-instance auto-scaling serverless application utilizing AWS services such as API Gateway, Lambda, Aurora DB, StepFunctions, SNS Topic, Athena, and Glue for intelligent insurance workflows.
- Collaborated with the Java development team to optimize the existing application for improved performance and scalability.
- Architected and developed RESTful API back-end applications, ensuring separation of development and deployment concerns.
- Designed and implemented data pipelines using AWS S3, Athena, and Glue for efficient data processing and analysis.
- Implemented detailed data security protocols using AWS IAM, enhancing data access controls and protection.
- Configured and integrated Adobe Sign into workflows, automating and streamlining signing and approval processes.
- Configured Box Webhooks and triggered AWS Step Function for automated execution of workflows.
- Developed an API to interact with AWS SQS for task scheduling and status updates.
- Leveraged CloudFormation templates for automated infrastructure deployment.
- Optimized data storage and retrieval using AWS RDS and DynamoDB.
- Monitored AWS services using CloudWatch and analyzed logs for performance analysis.
- Integrated with external client applications and infrastructure, including Box and other systems.
- Implemented caching mechanisms and optimized database queries to minimize response times and improve overall system performance.
- Integrated with external client applications and infrastructure, including Box and other systems.
- Worked closely with stakeholders to understand requirements and implemented efficient solutions to meet business needs.
- Contributed to user interface-level decision-making.

Energy & Environmental Research Center | Software Programmer | Grand Forks, ND **June 2020 - Dec 2020**

- Developed REST API based on ash analysis during coal combustion using Java.
- Responsible for multiple modules, including data calculation and analysis.
- Involved in all phases of the Software Development Life Cycle (SDLC), from analysis to GUI deployment.
- Designed use cases and implemented core Java, SQL, and Git to predict ash size and composition.
- Developed Java server components using Spring Boot, Hibernate, and web service technologies.
- Designed and implemented RESTful APIs using Spring REST API.
- Utilized Hibernate as the persistence framework for the DAO layer to access databases.
- Integrated Spring (Dependency Injection) for improved application architecture.
- Developed POJO classes to map corresponding tables in MySQL with different relationships.
- Utilized core Java concepts like exceptions and collections extensively.
- Optimized and enhanced application scalability by revising C program files.
- Utilized GIT for version control and Maven for build and configuration management.
- Implemented design patterns such as a business object, session facade, Model-View-Controller (MVC), DAO, and DTO.
- Participated in Functional Design Document, UML, and Technical Design Document reviews.
- Deployed and configured the application on the AWS EC2 Linux server using Tomcat.
- Used AWS S3 to upload the Java jar file for access through EC2.
- Developed and executed unit and mock tests using JUnit.

University of North Dakota | Graduate Teaching Assistant | Grand Forks, ND **Jan 2019 - Dec 2020**

- Worked as a teaching assistant for various classes, including Python, C#, operating systems, and Systems Programming.
- Maintained grade-book records for 100+ students per semester, performed teaching duties, mentoring, and clerical help.

KDUO Production | Software Developer | Nepal **Sep 2017 - Dec 2018**

- Developed RESTful services for trading stocks using Spring.
- Responsible for requirement gathering, coding, testing, and documentation.
- Integrated the full-scale Spring/Hibernate persistence solution with the application architectures.
- Owned projects, architected/designed solutions, and developed, tested, deployed, and maintained them.

- Used Spring Security for authentication and implemented JWT token for authorization.
- Used JDBC to connect to Oracle databases and retrieve required results.
- Implemented agile methodologies throughout the complete project lifecycle.

Bookworm Enterprise | Software Engineer | Nepal

June 2016 - July 2017

- Built and maintained a management application providing enterprise management software solutions using Spring Boot and J2EE components like JavaBeans, Collection framework, and Hibernate.
- Implemented Spring Security for user authorization based on the roles of the organization.
- Synchronized real-time inventory data to e-commerce channels and financial data by generating REST APIs.
- Implemented DAO layer using different Hibernate techniques like strategies, inheritance, annotation, and interfaces.
- Managed orders, inbound logistics, customs, and data processing.
- Maintained and updated the web store and server.

New IT Venture | Software Engineer | Nepal

Oct 2014 – Oct 2016

- Developed a Java-based Android application integrating REST APIs for most Android TV devices and different clients.
- Designed a SaaS product to create executables for various target devices (Android set-top box) from a single Java codebase.
- Contributed to migrating 20+ Android applications from the ADT plugin project to IntelliJ Idea.
- Developed a 50+ OTT/IPTV application to access Live TV, Movies, and On-Demand Multiscreen content.

EDUCATION

Master of Science in Computer Science

University of North Dakota, Grand Forks, ND

Jan 2019 - Dec 2020

GPA: 3.62/ 4.00

LEADERSHIP EXPERIENCES

Women Leaders in Technology (WLIT) | Co-Founder and Technical Incharge | Nepal

July 2015 - Present

- Co-founded a women's tech organization with a vision to encourage and help young women leaders in technology.
- Led Android development training for 30 participants and guided them in building applications in 2 weeks.
- Planned and organized activities and programs, including the annual boot camps and fellowships since 2015.
- Provided workshops on WordPress website development for local professionals.

AWARDS

Australian Awards Fellowship

University of Southern Queensland, Queensland, Australia

2017, May

- Received a scholarship to attend three week-long workshops on empowering women through entrepreneurship and business innovation in Sri Lanka, Nepal, and Bangladesh hosted by the University of Southern Queensland.
- The program addressed women's empowerment through entrepreneurship, digital technology, and innovation in Australia.