BIBEK DHUNGANA

Lubbock, Texas, 79416 • dhunganabibek2016@gmail.com • 832-310-6869

https://www.bibekdhungana.com/

https://github.com/dhunganabibek/

SUMMARY

- Professional experience at all stages of the Software Development Life Cycle (SDLC), including requirements gathering, analysis, design, implementation, maintenance, and testing using Agile/Scrum methodologies, Behavior Driven Development (BDD), and Test-Driven Development (TDD) approaches
- Proficient in developing front-end apps applying HTML, CSS, SASS, jQuery, JavaScript, AJAX TypeScript, Bootstrap, Angular, and React, as well as back-end programs utilizing Spring, Spring Boot, Spring MVC, Spring Security, ASP.NET, .NET Core, Express.js, NodeJS, Django, and Flask.
- Expertise with relational databases such as MySQL, PostgreSQL, Microsoft SQL Server, and Oracle and non-relational databases like MongoDB, Apache Cassandra, Amazon DynamoDB, and Azure Cosmo DB. Also, experience with object-relational mapping (ORM) frameworks such as Entity Framework, Spring Data JPA, and Hibernate.
- Competence with DevOps tools such as version control (Git, GitLab, GitHub, Bitbucket), build (Apache Maven, Gradle, ES Build, Webpack), continuous integration and deployment (Jenkins, Azure DevOps, CircleCI, GitLab, GitHub Actions), and containerization tools (Docker, Kubernetes, AWS Elastic Container Service (ECS), Azure Kubernetes Service (AKS)).
- Expertise in Cloud Computing Concepts (Compute, Storage, Database, Networking, Security, and Identity) with Amazon Web Services (AWS) like Elastic Compute Cloud(EC2), Lambda, Route53, Elastic Kubernetes Service(EKS), Virtual Private Cloud(VPC), Cloud Formation, Simple Storage Service(S3), Amazon RDS (Relational Database Services), Identity & Access Management(IAM) and Azure cloud services like Virtual machines (VM), App Services, Azure Functions, Blob Storage, Azure SQL, Cosmo DB, Azure Active Directory(AAD) & RBAC and Azure DevOps.
- Solid understanding of on-premises servers, cloud services such as Software as a Service (SaaS), Infrastructure as a Service (IaaS), and Platform as a Service (PaaS), as well as Infrastructure of Code (IAC) tools such as Terraform, AWS CloudFormation, and Azure Resource Manager (ARM).

EDUCATION

Texas Tech University, Lubbock, Texas

Bachelor's in computer science, Mathematics (Minor)

GPA: 4.0

Graduation Date: May 2023

Relevant Courses: Data Structures, Object-Oriented Programming, Design and Analysis of Algorithms, Database Design, Software Engineering, Computer Architecture, Operating System, Computer and Network Security, and Cloud Computing.

PROFESSIONAL EXPERIENCE

Heavy Construction Systems Specialists (HCSS), Houston, Texas

June 2022 - Present

Software Development Intern

- Developed landing page of developer portal for HCSS (https://developer.hcssapps.com/) to integrate all APIs and implemented custom React Components to generate an online interactive API playground.
- Implemented various REST API endpoints, validated pre-existing APIs (JSON and YAML) using OPEN API 3.0 specification, and publish it to API gateway using Azure Pipelines.
- Designed multistage Continuous Integration and Continuous Deployment (CI-CD) using classic and YAML pipelines in Azure DevOps to deploy in dev, staging, and production environment.
- Created and published Custom Pipeline Task Extension for Microsoft in Azure DevOps for automating API publishing and validating API endpoints to automate and publish APIs using Azure DevOps.
- Developed Static web App (React on the front end and .NET on the back end using Function app) to scan NPM and NuGet packages from Azure Table Storage. Also, implemented Custom Authentication using Azure Active Directory.
- Created Dependency track Application using Docker and deploy in Azure Container Apps to generate Software Bill of Materials (SBOM) files to monitor, Identify and remediate vulnerable components, measure, and enforce policy compliance for all NPM and Nugget Packages used by HCSS.
- Participated in creating an HCSSS marketplace using Monorepo to integrate HCSS services/ products with other vendors using Content Manager System, KeystoneJS, React, and PostgreSQL in a docker container.
- Worked with various Azure services like Serverless Computing (Function Application), and Blob Storage and wrote typescript/JavaScript scripts, plugins, and decorators and C# code for implementing authentication, authorization, and securing APIs.

Technology Stack: .NET, React, SQL Server, Postgres, NodeJS, Typescript, JavaScript, Docker, Azure, and Azure DevOps

Open Market Hub, Lubbock, Texas

Jan 2021 - Jan 2022

Software Developer Intern

Utilized Angular, HTML, CSS, JavaScript, TypeScript, Bootstrap, and tailwind CSS to design interactive front-end web pages.

- Extensive use of SQL Query along with advanced prepared and callable statements to develop database interaction with JDBC APIs and migrated to using native SQL query and (Hibernate Query Language) HQL using Spring Data JPA.
- Remodeled and mapped ER Diagram in Spring JPA for object-relational mapping (ORM), Developed the Hibernate DAO
 classes, and used hibernate in the data access layer to access & update information in the PostgreSQL.
- Developed the service layer that acts as a bridge between the presentation layer and Data Access Layer with Spring framework. And, designed Entity Class based on the preexisting database state.
- Secured the REST API by implementing OAuth2 token-based authorization scheme using Spring security.
- Developed the RESTful web services using Spring IOC to provide the user a way to run the job and generate daily status reports. Utilized Java Message Service (JMS) to exchange crucial data asynchronously for status reporting.
- Used AWS IAM to maintain the user credentials and created custom IAM policies for user groups defined within the
 organization and utilized the AWS Lambda platform to upload data into S3 buckets and trigger other Lambda functions.
- Used Spring Inversion of Control for injecting the beans and reduced the coupling between the classes and implemented
 the Model View Controller using Spring. Deployed Spring Boot-based Microservices Docker container using Amazon EC2
 container services and using AWS admin console.
- Coordinated with the QA team to ensure the quality of the application and was involved in Unit integration, debugging the
 code, bug fixing, acceptance testing with test cases, and code reviews.

Technology Stack: Spring MVC, Spring Boot, Angular, PostgreSQL, JPA/Hibernate, JavaScript, AWS, Jenkins, Junit. Tomcat, Maven

Mobility Automation Lab, Lubbock, Texas

Jan 2021 - Jan 2022

Researcher and web developer

- Leveraged Robotic Operating System (ROS), RGBD Camera, and integrated microcontrollers for implementing simultaneous localization and mapping (SLAM) for navigating a semi-autonomous robot.
- Participated in developing scientific and mathematical simulations using OpenCV, NumPy, SciPy, Pandas, and Matplotlib.
 Also, developed web, desktop, and mobile applications and designed data structures for computer vision algorithms.
- Designed and implemented client-server architecture to enable peer communication between the android app and autonomous robots. Developed an android application in Java to control and track the status of autonomous robots.
- Integrated user-facing mobile and web applications and integrated and designed APIs (systems integration) using Flask.
 Additionally, employed Nvidia Jetson SDK for Linux bash programming.

National Science Foundation I - Corps Program, Lubbock, Texas

May 2021 - Aug 2021

Internship (Innovation Hub, Texas Tech University).

- Remodeled Data monitoring system using ROS Framework, RGBD camera, and embedded microcontrollers to develop the interface for our semiautonomous driving using Spring boot, Hibernate, MySQL, and Angular.
- Performed software development, testing, and deployment of the application in the server using Amazon Web Services
 (AWS) EC2 Instance and store real-time data gathered from nanorobots in an S3 bucket.
- Conducted customer interviews to find the best product-market fit for our technology, designed a Minimal Viable product (MVP) and presented our results to NSF delegates.
- Excellent interpersonal skills to foster and fortify partnerships with stakeholders, adept in tactically de-escalating the conflict situation with team members and helping drive the meeting to achieve business objectives.

ASPS Enterprises Inc, Houston, Texas

Mar 2020 - Dec 2020

Data Analyst

- Employed NumPy, SciPy, Matplotlib, and Pandas to manage real-time data, performed mathematical optimizations to develop web API endpoints using Django and NodeJS, and created a dashboard to display data from REST API calls.
- Developed and implemented databases, data collection systems, data analytics, and other strategies that to optimize statistical efficiency to save data redundancy and reduce access time by 26%.
- Hosted multiple sites Apache Tomcat and Nginx Server in Ubuntu-based Virtual Private Server (VPS), managed server configuration, performed shell scripting, and automated the CI-CD pipeline using GitHub Actions.

TECHNICAL SKILLS

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

Front end: React, Redux, Next.JS, TypeScript, Angular, Bootstrap, HTML, CSS, SASS, JavaScript, TypeScript

Backend:.NET, Spring, Spring boot, Hibernate, Node.js, Django, FlaskDatabases:MySQL, PostgreSQL, MongoDB, Cassandra, Cosmo DB, OracleDevOps Tools:Git, Jira, Gradle, Docker, Kubernetes, Jenkins, Terraform

Cloud Services: Azure, AWS

Web Services: REST, GraphQL, Microservices

Tools: NPM, YARN, NuGet, Maven, Gradle, Junit

Frameworks: .NET, React, Angular, Spring, Spring Boot, Hibernate, Django, Express

AWARDS, INVOLVEMENT, AND CERTIFICATION

- Completed Udacity Front End React and Back End Java Development Bootcamp.
- Aspiring Full Stack Developer eager to learn new tools and technology.