

# MONIKA NAYAK

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#### SUMMARY

DevSecOps professional skilled in basic of frontend and backend development, expertly merging security into the development lifecycle. Proficient in DevOps principles, utilizing automation, CI/CD, and IaC for streamlined workflows. Collaborative team player with a track record of delivering secure, high-quality software solutions. Dedicated to continuous learning and staying current in the evolving DevSecOps domain.

#### EXPERIENCE

## SENIOR DEVSECOPS ENGINEER, 08/2023 - Current

Kyndryl, Bangalore, India

## Kyndryl IDP Development:

Developed Kyndryl IDP using the source code of Spotify's Backstage, enhancing its features and functionality.

Contributed to the customization and adaptation of Backstage to meet Kyndryl's specific requirements.

## Theme Design for Kyndryl:

Designed and implemented visually appealing and user-friendly themes for Kyndryl using React and TypeScript.

Leveraged React and TypeScript to ensure a seamless and responsive user interface. **Theme Design for HDFC Bank:** 

Contributed to the design and implementation of themes for HDFC Bank's web applications, enhancing the user experience.

Employed React and TypeScript to achieve a consistent and modern look and feel. **Custom Theme Creation:** 

Created custom themes to provide unique and branded appearances for both Kyndryl and HDFC Bank applications.

Utilized advanced styling techniques to ensure a cohesive and distinctive visual identity.

## Material UI Overriding:

Implemented theme customization and styling overrides using Material UI to maintain a consistent design language across applications.

Ensured seamless integration of custom themes with Material UI components.

## **Plugin Integration:**

Integrated plugins into Kyndryl's IDP, enhancing its capabilities and extending functionalities.

Collaborated with teams to identify, evaluate, and incorporate relevant plugins. **Integration:** 

Integrated GitHub Authentication seamlessly with Kyndryl IDP built on the Backstage platform.

Added plugins to extend the functionality and capabilities of Kyndryl IDP.

## Software Templates and Application Support:

Implemented software templates for various technologies, including Node.js, Next.js, Java Spring Boot, facilitating application development and deployment. Provided support for developers by creating templates that adhere to best practices and standards.

## Spring Boot Application Base Code:

Established the base code structure for Spring Boot applications, laying the foundation for consistent and scalable development.

Followed industry best practices to ensure maintainability, extensibility, and code quality.

## **Dockerization and Helm Chart Deployment:**

Created a Dockerfile to containerize Spring Boot applications, streamlining deployment and ensuring consistency across environments.

Developed Helm charts for Kubernetes, simplifying the deployment and management of applications in containerized environments.

## Unit Testing with JEST:

Implemented unit tests using JEST to ensure the reliability and correctness of the Kyndryl IDP and other applications.

Automated testing processes to catch and address potential issues early in the development cycle.

## CI/CD Pipeline Setup with Maven:

Established a Continuous Integration (CI) pipeline using Maven, automating the build, test, and deployment processes.

Configured Jenkins/GitLab CI/GitHub Actions for seamless integration with version control and automated workflows.

## SENIOR DEVSECOPS ENGINEER, 11/2022 - 07/2023

IBM-ISL, Banglore, India

## Testing and Quality Assurance:

Conducted comprehensive testing of applications to ensure responsiveness and efficiency, achieving a test coverage exceeding N/A.

Implemented Test Driven Development (TDD) practices, incorporating mutexes, semaphores, and other concurrency control mechanisms.

#### **DevOps and Automation:**

Automated the build and deployment process using Jenkins, resulting in an 80% reduction in manual work and improving overall efficiency.

Utilized AWS Cloud services, including EC2, auto-scaling, and VPC, to build secure, highly scalable, and flexible systems capable of handling anticipated and unexpected load bursts.

#### Security Implementation in Go:

Implemented security features in Go, including OAuth 2 authentication and encryption mechanisms such as TLS, ensuring the robustness and integrity of the system.

#### HashiCorp Vault and Cyber Security:

Engineered the deployment of HashiCorp Vault Agent using macros, contributing to the secure management of secrets.

Managed CyberArk, HashiCorp Vault, and other Privileged Access Management (PAM) platforms with end-to-end accountability.

#### **PKI and Token Management:**

Configured and managed the new Vault PKI for services, overseeing Public Key Infrastructure (PKI) and token technologies.

Worked on the rotation of vault secrets, implementing security best practices, and ensuring the integrity of authentication infrastructures.

#### Innovative Solutions and Technologies:

Innovated solutions using a smart TLS-enabled SDK for managing MS SQL privileged application identities, enhancing security protocols.

Engineered Python scripts to check the credibility of reports generated by Golangdriven SRG tool, ensuring the accuracy of security-related data.

#### SRG Tool and Release Management:

Contributed to the development, rollout, and releases of the SRG tool, focusing on life cycle management and meeting Service Level Agreements (SLAs).

Improved the reliability of systems by implementing self-healing and auto-scaling capabilities using Kubernetes, resulting in increased system resilience.

#### Microservices Deployment and Automation:

Automated the deployment of microservices using Kubernetes and Helm, leading to a 70% reduction in deployment time and streamlining the release process.

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## SENIOR PROJECT ENGINEER, 12/2016 - 10/2022

## Wipro Technologies, Banglore, India

#### Architectural Contributions and Microservices Development:

Actively participated in architecture discussions and played a key role in the development of various Python microservices on AWS Cloud Infrastructure.

Leveraged Python to design and implement robust microservices contributing to the overall system architecture.

#### AWS Configuration and Automation:

Configured S3 buckets with various lifecycle policies to optimize storage, archiving infrequently accessed data based on specific requirements.

Automated Continuous Integration/Continuous Deployment (CI/CD) pipelines and Infrastructure as Code (IAC) using Terraform for the product line in Bangalore, India.

## Golang Middleware Development:

Utilized Golang to develop middleware for Linux applications, managing the backend and deployment pipelines via Jenkins.

Achieved a 95% test coverage using Ginkgo and Go tools, emphasizing Test Driven Development (TDD) practices.

#### Concurrency in Go Services:

Designed and implemented Go services, leveraging concurrency primitives such as multi-threading, mutexes, semaphores, and TDD.

#### **DNS Implementation and Scalable Applications:**

Implemented Domain Name Service (DNS) through Route 53 to ensure highly available and scalable applications.

#### CI/CD Process Implementation:

Engineered Continuous Integration and Continuous Delivery processes using Jenkins, Python, and Shell scripts to automate routine tasks.

Created pipeline scripts for Jenkins, streamlining deployments of microservices and web applications.

#### Docker and Containerization:

Created Docker images using Dockerfile for a client project based on Node.js, PostgreSQL, and .NET.

Managed AWS infrastructure using Terraform, integrating and configuring Grafana and Prometheus Server with minimal downtime.

## Infrastructure Automation and Kubernetes:

Automated provisioning and repetitive tasks using Terraform, Python, Docker containers, and service orchestration.

Created and managed Kubernetes clusters for various deployments.

#### Ansible Playbooks and Automation:

Wrote Ansible playbooks to install and configure packages on servers, steering

automation through Ansible.

Utilized GitHub for version control, ensuring a streamlined and collaborative development process.

#### AWS Solutions and Reporting:

Designed and deployed AWS solutions using various services such as EC2, S3, EBS, Elastic Load Balancer (ELB), auto-scaling groups, API Gateway, CloudWatch, Route 53, and OpsWorks.

Developed and owned reporting for a nationwide retention program using Python, SQL, and Excel, resulting in significant time savings.

SKILLS	<ul> <li>Golang</li> <li>Python</li> <li>HashiCorp Vault</li> <li>Networking</li> <li>Javascript</li> <li>Docker</li> <li>Kubernetes</li> <li>Ansible</li> <li>Jenkins</li> <li>YAML scripting</li> <li>Shell/Bash Scripting</li> <li>AWS EC2</li> <li>AWS VPC</li> <li>AWS networking</li> </ul>	<ul> <li>AWS Lambda</li> <li>AWS SNS</li> <li>Route 53</li> <li>IAM</li> <li>RDS</li> <li>Linux</li> <li>S3</li> <li>Prometheus</li> <li>Grafana</li> <li>Terraform</li> <li>Sonarqube</li> <li>Jira</li> <li>Maven</li> <li>Nexus</li> </ul>			
PHONE	+91 7894889933, +91 9438399944				
EDUCATION	BITS, Pilani University BITS Post Graduate (M.Tech) in Software Engineering Berhampur University Berhampur Graduate in Bachelor of Computer Application Saraswati Shishu Vidya Mandir SSVM High School High School				
			PERSONAL INFORMATION	Date of birth: 06/03/93	
			AWARDS	<ul> <li>Won cash prize for obtaining the 1st position in Odisha IT Genius Examination.</li> <li>Wipro Samurai Award from Wipro Technologies for Best Performance.</li> <li>Game Developer at Jio Tesseract, Making games for Jio Glass.</li> <li>Proud Member India</li> </ul>	