

# Avinaya Acharya

Kathmandu, Nepal | +977-9860262181 | avinayaacharya123@gmail.com

## Professional Summary

Senior Cloud-Native Backend Engineer with 6+ years of experience designing and delivering scalable microservices and distributed systems using Java, Spring Boot, Golang, and AWS. Experienced in building serverless workflows, media processing pipelines, and Kubernetes-based platforms. Strong background in RESTful API design, CI/CD automation, containerized deployments, and cloud cost optimization. Proven ability to improve system performance, reliability, and operational efficiency in production environments.

## Core Competencies

- Microservices & Distributed Systems Architecture
- Cloud-Native Development (AWS, Docker, Kubernetes)
- Serverless Workflows (AWS Lambda, Step Functions)
- Event-Driven Architecture (RabbitMQ, AWS SQS)
- RESTful API Design & API-First Development
- CI/CD Pipelines & DevOps Practices
- Database Design (PostgreSQL, MySQL, MongoDB, DynamoDB)
- Performance Optimization & Cost Optimization
- Agile / Scrum Development

## Technical Skills

### Languages & Frameworks:

Java, Spring Boot, Hibernate ORM, Golang

### Frontend:

Angular 19 (migrated from AngularJS), JavaScript, HTML5, CSS3, SASS

### Cloud & DevOps:

AWS (Lambda, S3, EC2, OpenSearch, Step Functions, Elastic Beanstalk), Docker, Kubernetes, Git, GitHub, CI/CD Pipelines

### Databases:

PostgreSQL, MySQL, MongoDB, AWS DynamoDB

**Messaging & APIs:**

RESTful Web Services, RabbitMQ, AWS SQS

**Tools:**

Swagger, Postman, Log4j

## Professional Experience

### Inventech Group — Software Engineer

Dec 2019 – Feb 2022 | Dec 2023 – Present

**Technologies:** Spring Boot, Angular, AWS (Lambda, S3, EC2, OpenSearch, Step Functions), Hibernate, PostgreSQL, MongoDB, DynamoDB, RabbitMQ, Elastic Beanstalk, Microservices

- Developed and maintained **StudioCDN**, a digital media management platform handling media transcoding, storage, and distribution across a microservices ecosystem of 10+ services.
- Designed and implemented Spring Boot microservices using clean layered architecture (entity, repository, service, controller), improving API responsiveness and maintainability.
- Architected scalable data models using Hibernate ORM for relational (PostgreSQL) and NoSQL (MongoDB, DynamoDB) databases to support diverse media workloads.
- Developed RESTful APIs following API-first principles and integrated them with Angular frontend modules.
- Led frontend modernization by migrating AngularJS to Angular 10 with modular component architecture, improving UI performance and developer productivity.
- Designed AWS Lambda functions and implemented Step Functions with nested workflows to orchestrate complex media processing pipelines.
- Utilized AWS S3 for media storage, OpenSearch for metadata indexing, and RabbitMQ/SQS for asynchronous message-driven processing.
- Deployed Spring Boot services using AWS Elastic Beanstalk with auto-scaling and high availability configurations.
- Improved system observability through structured logging (Log4j) and comprehensive API documentation/testing using Swagger and Postman.
- Contributed to cloud cost optimization by identifying and eliminating unnecessary Lambda executions.

### BerryBytes — Software Engineer

Mar 2022 – Nov 2023

**Technologies:** Golang, Kubernetes, Docker, CI/CD, AWS Integrations

- Developed backend services in Golang for **01Cloud**, a Kubernetes-based PaaS platform enabling container orchestration, CI/CD pipelines, auto-scaling, and multi-tenant cluster management.
- Engineered concurrent services using Go's goroutines to support high-throughput platform features and improve reliability.
- Contributed to CI/CD automation and continuous deployment workflows, implementing build, deploy, and rollback pipelines to accelerate delivery cycles.
- Containerized Go-based microservices using Docker and managed deployments on Kubernetes clusters with monitoring, logging, and auto-scaling capabilities.
- Collaborated on research and prototyping integrations with external secrets management solutions (AWS, GCP, HashiCorp Vault).
- Improved platform scalability and developer experience by enhancing monitoring, backup strategies, and service integrations across AWS, MySQL/Spring Boot, and Python services.

## **Next Nepal Pvt. Ltd — Java Developer**

Oct 2018 – Dec 2019

- Developed backend applications using Java, Spring Boot, and Hibernate, building scalable RESTful APIs and optimizing server-side logic.
- Integrated MySQL databases with backend services, designing schemas and optimizing queries for improved data performance.
- Wrote clean, maintainable Java code and resolved production issues to enhance application stability.
- Applied best practices in testing and debugging to ensure reliable deployments.
- Streamlined version control workflows using structured Git branching and merging strategies.

## **Key Projects**

### **StudioCDN Platform**

(Spring Boot, Angular, AWS, Microservices)

### **Media Processing Pipeline**

- Designed a distributed media processing system using Spring Boot microservices and AWS Step Functions with nested workflows.
- Implemented parallel transcoding workflows using RabbitMQ message queues.
- Managed storage of 5M+ media assets in AWS S3 with lifecycle policies.

### **Cloud-Native Architecture**

- Migrated legacy monolithic components to microservices deployed on AWS Elastic Beanstalk.
- Configured auto-scaling to handle high daily API traffic while maintaining availability.
- Optimized cloud resource usage through Lambda improvements and spot instances.

## **Modern Web Interface**

- Led migration from AngularJS to Angular 10.
- Implemented lazy loading to reduce initial bundle size.
- Built reusable component libraries adopted across multiple internal applications.

## **Media Locker Service**

(Spring Boot, Hibernate, PostgreSQL)

- Built a secure digital asset management system handling large-scale media storage.
- Designed optimized Hibernate data models with PostgreSQL to reduce query latency.
- Implemented role-based access control (RBAC) for enterprise clients.
- Integrated AWS OpenSearch for efficient metadata search capabilities.

## **Serverless Workflow Automation**

(AWS Lambda, Step Functions)

- Automated 20+ manual processes using serverless architecture.
- Created nested Step Functions orchestrating media validation, transcoding, and distribution workflows.
- Reduced operational overhead through automated orchestration.
- Implemented a cost monitoring dashboard to identify and eliminate unnecessary Lambda executions.

## **Education**

B.Sc. in Computer Science & IT (CSIT)  
Liverpool International College / Bernhardt College  
Kathmandu, Nepal | 2015 – 2019