

BINISHA JOSHI

Full-Stack Developer | Cyber Security Enthusiast

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[Website](#) | [Medium](#) | [LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Full-stack developer with 3 years of experience building secure, scalable cloud-native applications. Transitioning focus toward cyber security, with hands-on expertise in AWS security services (WAF, IAM, Cognito, KMS, Secrets Manager), network reconnaissance tooling, and secure API design. AWS CloudOps Engineer - Associate certified and recognized as an AWS Community Builder (Security Category). Passionate about bridging development and security through threat modeling, shift-left security practices, and secure-by-design architecture.

TECHNICAL SKILLS

Security & Cloud: AWS WAF, AWS IAM, AWS Cognito (SSO/Okta), KMS, Secrets Manager, CloudTrail, GuardDuty, SNS, EventBridge, Nmap

Cloud & DevOps: AWS (Lambda, ECS, RDS, ElastiCache, Bedrock, Redshift, Athena, EC2, S3, ASG), Docker, Terraform, CodeBuild, CodePipeline

Languages: Python, TypeScript, JavaScript

Backend: FastAPI, Node.js, NestJS, Express.js, Django, Redis

Frontend: Nuxt.js, Vue.js, React.js, Next.js, HTML, CSS

Databases: PostgreSQL, MongoDB, MySQL

Practices: Agile/Scrum, CI/CD, Infrastructure as Code, Secure SDLC, Git & GitHub

WORK EXPERIENCE

Software Developer | Cloco Nepal Inc. Pvt. Ltd.

June 2024 – Present

- Integrated and productionized a Japanese payment gateway within a hospital reservation system using Nuxt.js and FastAPI, implementing encryption and secure payment processing for real-time medical bookings.
- Designed end-to-end system architecture (admin & user portals); deployed scalable backend services using AWS Lambda, ECS, RDS, and ElastiCache.
- Implemented event-driven SMS notifications with AWS SNS and EventBridge, improving booking confirmation workflows and user engagement.
- Led cross-border collaboration with a Japan-based engineering team while independently owning the full lifecycle of a separate production project.

Associate Software Engineer | Genese Solution Pvt. Ltd.

Sep 2023 – May 2024

- Built high-performance backend APIs for a ChatGPT-like LLM platform using Python and FastAPI, supporting AI-driven features and analytics.
- Integrated AWS AI and data services — Bedrock, Redshift, Athena, EC2, S3 — for scalable, data-driven application pipelines.
- Implemented secure Single Sign-On (SSO) using AWS Cognito and Okta; configured CI/CD pipelines with CodeBuild and CodePipeline via Bitbucket.
- Worked with Infrastructure as Code using Terraform and Terragrunt for repeatable, auditable cloud deployments.

Software Engineer Intern | Genese Solution Pvt. Ltd.

June 2023 – Sep 2023

- Gained hands-on experience in backend development with Node.js, FastAPI, and AWS services in a production environment.
- Collaborated in an Agile team environment with daily stand-ups, sprint planning, and Git-based version control.

PROJECTS & PUBLICATIONS

WAF-Protected Serverless API on AWS — *Security Architecture Series (Medium, 2-Part)*

Medium: [Part 1 \(Theory\)](#) | [Part 2 \(Step-by-Step\)](#)

- Designed and documented the security architecture of a serverless API protected by AWS WAF, API Gateway, and Lambda with centralized security logging.
- Covered threat modeling, rate limiting, bot control, WAF rule configuration, and log aggregation — providing a reproducible, testable setup.

Nmap Network Reconnaissance Scanner — *Python, Nmap (GitHub)*

- Built a network reconnaissance tool in Python that scans targets for open ports, detects services, grabs banners, assesses risk levels (Critical/High/Medium/Low), and generates reports in JSON, TXT, and HTML.
- Supports three scan modes (fast, normal, deep), OS detection, and per-service security insights (FTP plaintext, RDP exposure, SMB risks). Features rich terminal output with colour-coded tables.

SSO Configuration with AWS Redshift Using Okta — *Article (Medium)*

- Documented end-to-end configuration of AWS Redshift SSO using Okta as the identity provider — covering IAM role setup, Okta SAML app configuration, and secure credential handoff.

AWS Redshift Password Rotation with Secrets Manager & KMS — *Article (Medium)*

- Detailed the implementation of automated password rotation for AWS Redshift using Secrets Manager integrated with KMS for envelope encryption — a key security hardening pattern for cloud databases.

EDUCATION

BSc. CSIT | **St. Xavier's College, Kathmandu**

2018 – 2024

Grade: 85.2% | Government of India Scholarship Holder | Recipient, Fr. Marshall D. Moran, S.J. Memorial Award for Excellence in Academics

XII (Science) | **Trinity International Higher Secondary School, Kathmandu**

2016 – 2018

Grade: 3.58 / 4.0 (A)

CERTIFICATIONS & ACHIEVEMENTS

- AWS Certified CloudOps Engineer – Associate (SOA-C03) · Valid April 2026 – April 2029
- AWS Community Builder – Security Category · 2025 – Present
- Emerging Talent of the Year · 2025
- Recipient, Fr. Marshall D. Moran, S.J. Memorial Award for Excellence in Academics · Undergraduate
- Government of India Scholarship Holder · Undergraduate
- Public Relations Officer, SQC UDAAN · Undergraduate
- Class Representative · Undergraduate
- School Prefect · High School