

# GURNIK SINGH

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AWS Cloud Engineer with hands-on experience designing and implementing secure, highly available infrastructures on AWS. Specialized in IAM security frameworks, infrastructure automation, and serverless architecture. Certified in AWS Engineering, with Cloud Practitioner, AI Practitioner and Solutions Architect Associate. Demonstrated success improving system reliability, reducing security vulnerabilities, and optimizing cloud operations through automation and DevOps practices while maintaining compliance requirements.

## Technical Skills

- AWS
- Problem Solving
- Linux
- DevOps
- Terraform
- ServiceNow
- Python
- Team Collaboration
- AI

## PROFESSIONAL EXPERIENCE

**Solecurity** | *Cloud Support Engineer* | Internship Dec 2024 - Present

- Architected comprehensive AWS IAM security framework for fitness application startup, implementing role-based access controls with least-privilege principles that eliminated shared root account usage across 10 employees
- Migrated healthcare application from manual AWS Console deployments to Infrastructure as Code using AWS CDK, reducing deployment errors by 80% and enabling consistent environment replication
- Redesigned network architecture for patient portal application with proper public/private subnet isolation, reducing security vulnerabilities by 60% and ensuring HIPAA compliance for sensitive healthcare data
- Developed and implemented Pilot Light disaster recovery strategy for CloudSleuth's AWS environment, achieving 30-minute RTO requirement while maintaining budget constraints and remediating 12 critical security vulnerabilities
- Architected serverless AI ticket system security framework using AWS Organizations with role-based access for 12 employees across 5 teams, eliminating shared credential usage and implementing encryption at rest/in transit
- Enhanced security for Lambda, API Gateway, DynamoDB, and Bedrock by implementing service-level permissions and data encryption, meeting compliance requirements for customer data handling

## CLOUD PROJECTS

### Serverless Video Processing System

- Architected and implemented complete video processing solution using Lambda, S3, API Gateway, and MediaConvert with CloudFront distribution
- Deployed infrastructure using CloudFormation templates, enabling consistent environment replication
- Created intuitive web interface allowing users to upload, process, and access videos with appropriate security controls

### Enterprise-Grade File Storage Platform

- Designed secure cloud storage architecture for FileVault startup using S3 with server-side encryption
- Implemented IAM policies following least-privilege principles to protect sensitive customer data
- Optimized for both security and usability, meeting specific business requirements for small business users

### CI/CD Pipeline for Web Development

- Built automated deployment workflow using GitHub Actions and S3 for CloudPipe web application
- Reduced deployment time from 20 minutes to under 30 seconds while eliminating manual errors
- Implemented notification system providing real-time deployment status updates to development team

### Serverless CRUD Application

- Developed fully serverless application using API Gateway, Lambda, and DynamoDB

- Implemented secure data access patterns with IAM policies and API authentication
- Created infrastructure templates enabling one-click deployment of the entire application stack

## ADDITIONAL EXPERIENCE

**MortgagePal** | Mortgage Consultant | March 2024 - Present | Full Time

**True North Mortgage** | Mortgage Agent | April 2021 – March 2024 | Full Time

- Analyze client requirements and provide tailored product recommendations, applying systematic assessment methodologies similar to technical requirement gathering
- Ensure compliance with federal and provincial regulatory frameworks, developing expertise in navigating complex rule systems similar to cloud compliance requirements
- Build client relationships through clear communication of technical concepts, translating complex mortgage options into understandable recommendations
- Maintain current knowledge of industry regulations and product offerings, demonstrating commitment to continuous professional development

## CERTIFICATIONS & EDUCATION

**AWS Solutions Architect Associate** | Amazon Web Services (AWS) | June 2025

**AWS AI Practitioner** | Amazon Web Services (AWS) | May 2025

**AWS Cloud Practitioner** | Amazon Web Services (AWS) | February 2025

## ADDITIONAL INFORMATION

**Languages:** English (Native), Punjabi (Intermediate)

**Technical Interests:** Cloud security architectures, serverless applications, infrastructure automation

**Personal Interests:** Basketball, Strength Training, Music Production, Travel