**SWAPAN KUMAR SOREN**

**Enterprise Applications and Cloud Solutions Architect**  
Bengaluru, Karnataka | +91 9980137834 | [explain.cs@gmail.com](mailto:explain.cs@gmail.com)  
[LinkedIn](https://www.linkedin.com/in/swapan-kumar-soren-93b743277/) | [GitHub](https://github.com/swapanGit)

**PROFESSIONAL SUMMARY**

Results-driven Enterprise Applications and DevOps Cloud Architect with 10+ years of experience in designing and implementing scalable cloud-native solutions across AWS, Azure, and GCP platforms. Specialized in microservices architecture, containerization strategies, AI-powered infrastructure, and cloud migration. Proven track record of reducing infrastructure costs, enhancing application performance, and implementing advanced observability solutions. Adept at leading technical teams and delivering enterprise-grade solutions that drive business transformation and operational excellence.

**PROFESSIONAL EXPERIENCE**

**Lead Architect – SPEKTRA Platform Deployment, South Asia**

**NTT, Bangalore** | Nov 2024 – Present

* **Platform Architecture & Regional Rollout**:
  + Led the architectural design and regional deployment of NTT's next-generation AI-powered SPEKTRA platform
  + Ensured seamless integration with existing enterprise infrastructure while aligning with global standards
  + Established deployment frameworks for managed network services infrastructure with end-to-end monitoring
  + Delivered a highly available, scalable, and secure managed services platform tailored for South Asia
* **Cloud-Native Infrastructure on Azure**:
  + Architected and deployed scalable Azure Kubernetes Service (AKS) cluster as microservices backbone
  + Implemented high availability and resilience patterns for all platform components
  + Designed and deployed multiple microservices within AKS supporting key SPEKTRA functionalities
  + Integrated Azure Function Apps for serverless event-driven processing and automation
* **Advanced Observability & AIOps Implementation**:
  + Integrated Grafana with AKS following Helm-based deployment best practices for monitoring
  + Deployed LogicMonitor for comprehensive infrastructure monitoring across cloud and edge resources
  + Leveraged SPEKTRA's AIOps capabilities for automated incident management and anomaly detection
  + Enabled advanced edge automation through SPEKTRA Edge, ensuring comprehensive observability
* **Workflow Orchestration & DevOps Excellence**:
  + Implemented production-grade Apache Airflow for complex, high-volume workflow management
  + Configured optimized executor setup and high availability for workflow orchestration
  + Automated deployments via CI/CD pipelines for streamlined and reliable monitoring
  + Enhanced operational efficiency through proactive monitoring and AI-driven incident management

**Cloud Solution Architect**

**Cognis Solutions, Bangalore** | Jan 2024 – Oct 2024

* **Enterprise API Management Platform Implementation**:
  + Architected and implemented Apigee API management solutions with multi-layered security controls
  + Established API governance frameworks and lifecycle management processes
  + Enhanced API reliability metrics by 30% and implemented zero-trust security compliance
  + Designed fault-tolerant API architectures with automated failover mechanisms
* **Cloud-Native Deployment Architecture**:
  + Engineered GitOps-based CI/CD pipeline for Kubernetes environments (GKE)
  + Implemented blue-green deployment strategies ensuring zero-downtime SLAs
  + Designed Helm charts ecosystem with ArgoCD for declarative application delivery
  + Increased deployment frequency by 40% and reduced deployment errors by 50%
* **Enterprise Security Infrastructure Implementation**:
  + Implemented MTLS (Mutual Transport Layer Security) on cloud load balancers
  + Designed end-to-end encryption for data-in-transit with certificate rotation policies
  + Integrated with cloud IAM for comprehensive authentication and authorization
  + Achieved compliance with GDPR, SOC2, and industry security standards

**Senior Advisory Consultant**

**IBM, Bangalore** | Sep 2021 – Jan 2024

* **Enterprise Cloud Migration Strategy**:
  + Orchestrated multi-phased migration of 100+ applications to Google Cloud and Azure
  + Designed hybrid connectivity architectures reducing infrastructure costs by 20%
  + Implemented performance optimization strategies enhancing application metrics by 15%
  + Created cloud center of excellence frameworks and governance policies
* **DevOps Transformation Leadership**:
  + Led implementation of enterprise continuous integration/continuous deployment platform
  + Established infrastructure-as-code practices with automated testing frameworks
  + Increased software development velocity by 25% through CI/CD automation
  + Implemented observability strategies with distributed tracing and centralized logging
* **Technical Leadership**:
  + Managed technical operations and mentored team of 10 cloud engineers
  + Established architectural review processes and technical governance procedures
  + Ensured high availability of mission-critical applications with 99.9% uptime SLAs
  + Conducted architectural decision reviews and technical debt management

**Senior Software Engineer**

**DXC, Bangalore** | Sep 2018 - Sep 2021

* **Infrastructure Automation and DevOps**:
  + Developed Ansible configuration management scripts reducing system update time by 50%
  + Created Jenkins pipeline automation increasing task coverage by 25% in AWS CI/CD workflows
  + Implemented containerization strategies with Docker and container orchestration
  + Designed microservices deployment architectures for cloud-native applications
* **Cloud Infrastructure Engineering**:
  + Implemented AWS infrastructure using Terraform (IaC) including EC2, S3, IAM, ELB
  + Created auto-scaling architectures for elastic workload management
  + Designed security groups and network policies for defense-in-depth protection
  + Reduced infrastructure costs by 20% and improved deployment velocity by 50%
* **Solution Architecture**:
  + Upgraded application frameworks with business-critical features
  + Designed data flows for new application capabilities and integration patterns
  + Implemented UAT environments and resolution strategies for production issues
  + Enhanced application functionality and user experience through architectural improvements

**Senior Software Engineer**

**Tek Systems, Bangalore** | Feb 2016 - May 2018

* **Data Pipeline Engineering**:
  + Redesigned ETL processing scripts reducing data loading time by 50%
  + Improved data accuracy to 99% through validation frameworks and quality controls
  + Enhanced decision-making capabilities through optimized data processing
  + Implemented data governance practices ensuring GDPR compliance
* **Technical Team Leadership**:
  + Led team of 5 engineers in large-scale database migration initiatives
  + Achieved 20% performance improvement through database architecture optimization
  + Reduced operational costs by 15% through consolidation and modernization
  + Established database monitoring and alerting frameworks for proactive management
* **Cloud Product Development**:
  + Developed SaaS product for AWS Marketplace using EKS and containerization
  + Implemented cloud-native architecture with microservices and API gateway patterns
  + Created product search capabilities and purchasing workflows in AWS ecosystem
  + Established licensing management systems and end-user agreement frameworks

**TECHNICAL EXPERTISE**

**Cloud Platforms**: AWS, Azure, GCP, Oracle Cloud Infrastructure  
**Cloud Services**: EC2, S3, Azure VM, Azure Function Apps, VPC, Azure Network, GKE, AKS, EKS, Cloud Watch, Cloud Monitoring, Azure Monitor, Cloud Storage, Azure Storage

**DevOps & CI/CD**: Jenkins, GitHub Actions, ArgoCD   
**Infrastructure as Code**: Terraform, Ansible   
**Containerization**: Docker, Kubernetes, Helm, Istio, Apache Airflow   
**Monitoring & Observability**: ELK Stack, Prometheus, Grafana, Datadog, LogicMonitor

**Security & Compliance**: SonarQube, Coverity, WhiteSource, CodeQl, Dependabot, OWASP, SAST/DAST, mTLS  
**Version Control & Repositories**: GitHub, GitLab   
**Build Tools**: Maven, Gradle, npm, pip  
**Programming Languages**: Java, Python, JavaScript, Go (basic)

**Databases**: Oracle, MongoDB   
**Project Management**: Jira, Confluence, Cast Highlight   
**Collaboration Tools**: Slack, Google Workspace, Office 365, Microsoft Teams

**CERTIFICATIONS**

* **Oracle Cloud Infrastructure 2021 Certified Architect Professional** [282349437OCICAP2021OPN]
* **Google Cloud Certified Professional Cloud Architect** [Certification ID: uQRnpq]
* **Microsoft Certified: Azure Solutions Architect Expert** [Certification Number: I316-9958]
* **AWS Certified Solutions Architect - Professional** [In Progress]

**EDUCATION**

**B.Tech in Computer Science**  
Bharath University, Chennai | Sep 2008 - Mar 2012

**ICSE and ISC**  
De Nobili School, FRI | May 2005 & May 2007

**ADDITIONAL SKILLS & ACHIEVEMENTS**

* **Cloud Architecture Patterns**: Microservices, Event-driven, Serverless, Domain-driven Design
* **High Availability Design**: Fault tolerance, Disaster recovery, Geo-redundancy
* **Cost Optimization**: FinOps practices, Reserved instances, Spot instances strategies
* **Security Architecture**: Zero-trust frameworks, Data encryption, Identity management, mTLS implementation
* **Performance Engineering**: Load testing, Performance bottleneck analysis, Optimization
* **AI-Powered Operations**: AIOps implementation, Anomaly detection, Automated incident management
* **Edge Computing**: Edge automation, Multi-region deployment, Edge-to-cloud observability