Shiv Kumar Arora

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PROFESSIONAL SUMMARY

SAA-C03 Certified Solutions Architect and Software Engineer with a **4.0 GPA**, specializing in **DevOps**, **Cloud Computing**, and **Infrastructure as Code**. Proficient in designing secure, scalable architectures using **AWS services** (EC2, S3, RDS, VPC, Lambda) and automating infrastructure provisioning with **Terraform**. Experienced in building efficient **CI/CD pipelines** with **Jenkins**, **AWS CodePipeline**, and **GitHub Actions**, and managing containerized deployments with **Docker** and **Kubernetes**. Adept at monitoring and optimizing systems with **AWS CloudWatch** to ensure performance, reliability, and cost efficiency. Skilled in **Full Stack Development** with expertise in **Data Structures and Algorithms.**

TECHNICAL SKILLS SUMMARY

- **Cloud Computing**: AWS (EC2, S3, RDS, IAM, VPC, Lambda, ECS, CloudWatch, Auto Scaling, CloudFormation)
- **Networking**: Load Balancers (ALB, NLB), Security Groups, Route 53, VPN
- **Infrastructure as Code (IaC)**: Terraform, AWS CloudFormation
- **CI/CD Tools**: Jenkins, AWS CodePipeline, CodeBuild, CodeDeploy
- **Containerization**: Docker (Multi-Stage Builds, Docker Compose)
- **Orchestration**: Kubernetes (StatefulSets, Helm, Scaling)
- **Monitoring**: AWS CloudWatch, ELK Stack (Elasticsearch, Logstash, Kibana)
- **Machine Learning on AWS**: SageMaker, Rekognition, Comprehend, Personalize
- **Version Control**: Git, GitHub, GitLab
- **Web Development:** HTML, CSS, JavaScript (ES6+), React.js, Node.js, Express.js
- **Database Management:** MySQL, Amazon RDS (PostgreSQL), SQL Query Optimization
- **Programming Languages:** C#, Java,
- **OOP & DSA:** Key principles (Encapsulation, Inheritance) and data structures (Arrays, HashTables, Trees)

ACADEMIC PROJECTS

Scholar Homes Web Application
- Developed a **Node.js, Express.js, JavaScript, and MongoDB** application, serving **500+ students** with verified deals.
- Implemented secure **university-credential-based authentication**, eliminating unauthorized access by **100%**.
- Built dynamic search filters, improving search accuracy and usability by **40%**, and integrated real-time bidding, driving **70% user participation**.
- Enhanced engagement with personalized alerts and budgeting guides, increasing retention by **25%**.

Containerized Java Spring Boot Application Deployment
- Engineered a **Dockerized Spring Boot application** with **multi-stage builds**, optimizing image size and reducing build time by **30%**.
- Designed a **stateful Docker Compose configuration** integrating **MySQL** for seamless service management.
- Automated build, test, and deployment workflows using **Jenkins declarative multi-stage pipelines**, improving CI/CD efficiency by **50%**.
- Orchestrated deployment on **AWS ECS** with **Kubernetes**, ensuring **scalability**, **self-healing capabilities**, and high availability for over **500+ daily users**.

Infrastructure Automation and Monitoring with AWS
- Automated multi-tier infrastructure setup with **AWS CloudFormation**, cutting manual work by 80%.
- Configured **VPCs**, **EC2 instances**, **ALBs**, and **RDS databases** for 99.99% uptime.
- Set up **CloudWatch Alarms** for Auto Scaling and utilized **AWS Systems Manager** to automate patching and compliance.
- Reduced storage costs by 30% with **S3 lifecycle policies** and improved governance using **AWS Config**.

EDUCATION

Diploma in Software Engineering Technician   01/2023 –
Centennial College   04/2024
- **Relevant Coursework**: SQL, Software Requirements Engineering (SRS), C#, Java, Python, HTML/CSS,   Toronto, Canada
  JavaScript, React, C++, Data Structures & Algorithms (DSA), Unix/Linux
- Graduated with a 4.0 GPA, demonstrating strong commitment to academic excellence
- **Led a team of 4** to develop a full-stack web application using the **MERN stack (MongoDB, Express, React, Node.js)**, utilizing **Jira**, **GitHub**, and **Postman** for efficient collaboration and testing.

CERTIFICATES

AWS Solution Architect 🔗
Associate Level