A professional with **excellent communication skills** and extensive experience working with clients and partners for more than **5+** years of **Cloud architecture and implementation** with overall **15+** years of experience. An outstanding performer in building/managing high-quality solutions that are scalable, highly available, fault-tolerant, and tailored towards an enterprise goal. **Proficient in Cloud engineering** and **cloud security** with hands-on knowledge in automating, building, and deploying processes for operational excellence. Ambitious and diligent with a drive for perpetuating the **organization’s mission and values**.

**Enthusiast** building generative AI applications with **Bedrock** using Amazon’s FineTuned Models (FM) and organizations data; build agents that can execute complex business tasks dynamically, extend the power of FM’s using **RAG**.

**Highlights of Expertise:5**

|  |  |  |
| --- | --- | --- |
| * **Cloud Computing** | * **Performance Tuning** | * **DevOps** |
| * **Cloud Service Selection** | * **Cloud Security** | * **SecOps** |
| * **Cloud Infrastructure** | * **Data Analytics** | * **Automation** |
| * **Cloud Networking** | * **Data Integration** | * **Cost Containment** |

**Professional Experience**

**Client Name – Flowserve, USA**

**Organization – NTT DATA; Jan/2022 – April/2024**

**Coud Engineer/Architect (Python, S3, EC2, VPC, VPN, RAM, ELB, ECS, Service Catalog, Glue, Athena, Redshift, Kinesis, Kafka, Terraform)**

* Apply best practices in **architecture design** resulting in improved performance and cost optimization.
* Create **assessments, plan and migration** that include Cloud capabilities, OS, codebase, databases, cloud services, networking, applications, dependencies, tools, deployments, modernization, etc.
* Experience with implementing **Cloud Design Patterns** based on solution requirements.
* Develop a **Solution blueprint** – involving partner capabilities, in-house capabilities, and new builds.
* Used **Cost discounts** based on **workload patterns,** andleveraged discounts pricing up to 20%-30%.
* Work with a team of **DevOps/ SecOps** engineers to Architect/Integrate **AWS solutions**.
* **Ensure high availability of critical systems** and addressing potential issues before they escalated.
* Use of **ECS** service along with **Fargate** for unpredicted workload handling.
* Creating **lifecycle policies for S3** to move data into right buckets as per suage thus **saving** extra **cost.**
* Demonstrate experience design the Virtual Private Cloud (**VPC**) environment, availability zones **(AZ)**, **VPN**.
* Ensuring that **data flow is secure** using data protection services like **Macie** (data encryption, data integrity, data governance), **KMS (Encryption Keys)**, Secrets manager, Certificate Manager **(ACM)** etc.
* Security features like **WAF**, **Shield**, and **Firewall Manager** were implemented to secure **Network/Infra**.
* Services like **IAM**, **Cognito**, **RAM** were used to ensure that only **authorized** users can access the services.
* Apply AWS config and AWS systems Manager to detect and report any unauthorized change in infrastructure.
* Utilize **Lambda function, Event Bridge, Step-functions** for **serverless** computing solutions.
* Design and created separate AWS accounts for sensitive OU and tags the resources to bill them separately.
* Design separate Logs Account to keep the logs safe in case of any breach, access available through PLink.
* Assisting team to build the templates and **automate** the infrastructure using **Terraform**.
* Participates in **CAB** **meetings** to ensure, only **approved Changes/Migrations** are executed for clients.
* Managing **Microservices** build and deployment in multiple environments and using **containerization.**
* Assessment and selection of right **Compute** **size**, **DB**, **CIDR**, N/W Bandwidth**, framework** andtechstack.
* Provide recommendation optimizing **Cloud usage costs** using **usage patterns** and trends using Cost explorer and **cost Categories** among department and accounts.
* Managing multi-environment’s release and Deployment process (GB/Canary) without affecting each other.
* Responded to specific customer requests, including **RFP** responses and industry-specific solutions.
* Gained extensive knowledge of products and services to provide best-in-class sales engineering solutions.
* Utilized creative **problem-solving skills** to overcome technical challenges in the overall process.
* **Increased security compliance** by enforcing **IAM,** User Groups, Roles, encryption, ACL policies etc.
* Implemented monitoring solutions using **Amazon CloudWatch, VPC flow logs, CloudTrail, SNS and SQS** to provide real-time alerts on system health and performance metrics.
* Created a POC to use Sage maker on top of big data platform in order to build, train and deploy ML models at scale using Regression models.

**Client Name - Sensormatic Solutions TrueVUE /Creative Retail (AWS & Azure)**

**Organization – NTT DATA; Feb/2018 – Dec/2021**

**Cloud Engineer/Architect (Python, S3, EC2, ECS, EKS, Systems Manager, Load Balancer, Glue, Redshift, Kinesis, Snowflake, CI/CD Pipelines, Terraform)**

* **Solution design and implementation experience** with services such as **RDS**, **API Gateway**, **ELB,**  **Serverless**(**ECS/EKS, Fargate**), **EC2**, **VPC,** **SES/SNS**, **S3, CloudTrail, CloudWatch, Lambda, SQS** etc.
* **Integrating** cloud services like **Route53** **ARC**, **Global accelerator, CloudFront** with the usual services.
* **Cloud Networking** like **VPC, VPN, Transit GW,** and **scaling the network design using Global Accelerator, Transfer Acceleration, Load balancer,** anduse of **CloudFront** distributions.
* **Moving On-premises applications** into public cloud like AWS and Azure using various migration services.
* **Collect/ingest data** from multiple sources and a lot of devices using **Kinesis Streams, S3,** **AWS** **Glue**.
* Generate **visualizations using Athena and Tableau** from DWH platforms Snowflake, RedShift.
* Used different Cloud platform and services like **Snowflake**, **S3 Storage**, **S3 Glacier**, **EFS/EBS**.
* Creating **AWS CI/CD Pipelines** using **GitHub, Jenkins and SonarQube** for a few **cloud customers.**
* Increased high availability and fault tolerance by configuring **Multi-AZ deployments** in RDS instances, and also leveraged the **RDS proxy** to direct connections to reduce overhead on databases.
* Designed custom **IAM policies** to maintain strict access control for various user roles within the organization.
* **Cross-sharing of resources** among different accounts using Resource Access Manager (**RAM**) and creating portfolios using **Service** **Catalog.**
* Automated backup strategies using Amazon RDS snapshots, ensuring **data integrity** during **disaster** **recovery** scenarios.
* Run data processing workloads and integrate with AWS Batch for serverless parallel processing using **ECS** and **Fargate.**
* Implemented efficient cost tracking with **AWS Cost Explorer**, enabling better budgeting decisions across multiple projects.
* Reduced deployment time for applications through the use of AWS **CloudFormation** templates.
* Use of **Guard Duty**, CloudWatch, CloudTrail and **AWS Config** for detecting and recording metadata about every action that a resource takes, like creation, modification, which helps analysing the **risk** and **health**.
* Achieving quality goals by proposing and addressing processes with a focus on **continuous improvement**.

**Client Name – Axis Point Health, USA**

**Organization – NTT DATA; April/2017 – Jan/2018**

**IT Consultant (Snowflake, BigQuery, S3, RDS, Data-modelling, Spark, HDFS, Tableau)**

* Development and design of UIs usingAngular JS,and **Java** for Care Management and Care Provider.
* **Plan and execute stories into development** according to **business need**s.
* Backend development and stored procedure writing, creating **Data Warehouse/lake for visualization**
* Managing **Backlog** and planning Sprints release per Sprint cycle.
* Developed scripts for automating routine tasks, reducing human error and increasing overall efficiency in the administration process.
* Resolved complex technical issues promptly by leveraging strong troubleshooting skills and root cause analysis techniques.
* Maintained comprehensive documentation of server configurations, network architecture, and troubleshooting procedures to ensure consistency across the team.
* Provided hands-on support for end-users experiencing issues with Linux-based systems or applications, facilitating quick resolutions and minimal disruptions to productivity.
* Conducted regular audits of system logs to identify potential vulnerabilities or unauthorized activities within the IT environment.

**Client Name – CSX Transportation, USA**

**Organization – NTT DATA; Jun/2016 – Mar/2017**

**IT Principal Consultant**

* **Developing new UIs, and converting logic from Mainframe to Java** using **Prime faces**.
* Migrating **new UIs from Mainframe** to Websphere and **successful transition** of all modules.
* Developing new and converting old reports for Interchange, Stcc, CityState, modules into new formats.
* Provided training and mentoring to junior team members, building their skills and fostering a collaborative work environment.
* Analysis of system performance, allowing for proactive identification of potential issues users.

**Client Name - Goldman Sachs - Product and Price/Client Ref Data**

**Organization – NTT DATA Inc.; Salt Lake City, Mar/2012 – Feb/2016**

**IT Consultant**

* Worked in **AGILE** environment with planning, scoping, and building technical solutions.
* Coordinating, planning and execution of **Business Contingency Plan (BCP)** and other ad-hoc events.
* Activities like **setting-up and maintain UAT/QA environment for DEV/QA/PROD etc**.
* Active participation in the **release and deployment process and post-deployment checkout**.

**Client Name - Goldman Sachs – Treasury (Payment Systems)**

**Organization – NTT DATA Inc.; Noida – New Jersey; Dec/2007 – Jan/2011**

**Sr. Systems Engineer**

* Participated in all phases of SDLC with emphasis on Development, Maintenance, and Support.
* **Manage the development/production infrastructure, change control,** configuration.
* **Maintain and support** in-house and third-party applicationssuite.
* Providing user support for **Tier-1 critical applications** and tracking all the requests till resolution.

**Client - Nortel Networks - 1XRTT IP Backhaul, SMS BCP, BSC SBS,**

**Organization – TCS, MUMBAI; May/2005 – Nov/2007**

**Systems Engineer**

* Worked in the Telecom domain for NORTEL networks in developing and designing software.
* Have worked on several projects like **1xRTT Integrated IP Backhaul on 4pGeMSW/BSC**, **CDMA BSC – SBS Robustness**, and **SMS Border Cell Paging (SMS BCP).**

**Client – National Thermal Power Corporation – PLMS, ICBS, India**

**Organization – Rensol Systems, New Delhi; Aug/2004 – Apr/2005**

**Assistant Systems Engineer**

* Have worked on the following projects in **NTPC – Project and Loan Monitoring System** **– International Funding**, and **Integrated Costing & Budgeting System (ICBS)**.

**Academics and Achievements**

* **AWS Certified Cloud Practitioner** from **Amazon.** (**Reg ID**: **CC20F47CGFB11FWG**)
* **AWS Certified Developer - Associate** from **Amazon**. (**Reg ID**: **82PZGVRDYFE1QTC8**)
* **AWS Certified Solutions Architect – Associate** from **Amazon. (Reg ID: DJB255CC0MF11D3H**)
* **ITIL®-Foundation** Certificate in IT Service Management, (**Reg ID: 5557461.20481172)**
* **Certificate** in **Data to Insights with Google Cloud** from **Alchemy.**
* **SnowPro Core certification preparation course** from **Snowflake.**
* **People Management Essentials – Certificate of Excellence from NTT DATA.**
* **Strong experience working at Client sites and handling client queries independently.**
* **Academics** - Master’s in computer applications (**MCA -74%**) specialization in **Computer Science (2004)**
* Maintained **First Class Academic** progression throughout studies.
* Attending AWS and other public Cloud Summits to understand the next gen cloud capabilities and to utilize the same in business outcomes.
* <https://www.linkedin.com/in/vinod-kumar-84268414/>
* <https://vashisthavinod.com/>

**Technical Skills**

* **Python, Java**, **Spring boot**, **Kafka,** **Kinesis**, **Microservices**, **RDS,** **MySQL**, **Oracle 10g, Glue, Redshift, Athena, Dynamo DB**, **AWS Services**, **S3**, **VPC, Lambda, Event-Bridge, Step-Functions,** **Jira**, **GitHub**, **Jenkins**, **Docker**, **SonarQube**, **API Gateway**, **Kubernetes**, **ECS**, **EKS**, **Terraform**, **Apache Tomcat** etc.