**Manmeet Singh**

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**Professional Summary:**

Cloud and DevOps enthusiast with knowledge in AWS, Terraform, and related technologies. Demonstrated ability to learn and implement cloud infrastructure and DevOps practices through personal projects. I am seeking a suitable role to leverage my passion for technology and problem-solving skills in a professional setting.

**Skills:**

* **Cloud Platform:** AWS
  + Proficient in deploying and managing EC2 instances, S3 buckets, and VPCs.
  + Familiarity and hands-on experience with IAM for secure access management.
  + CloudWatch for cloud telemetry.
  + Familiar with setting up multi-account environment via AWS Control Tower to extend the capabilities of AWS Organizations.
  + DNS record management through Route 53.
  + Certificate management via AWS Certificate Manager.
  + Setting up budgets for cloud cost optimization.
  + SNS to receive instance state change and budget alert notifications.
* **Infrastructure as Code:** Terraform
  + Familiar with modules, state management, and Terraform Cloud for remote operations.
  + Terraform scripts and configuration files to provision AWS resources.
* **Containerization:** Docker
  + Familiar with creating and managing Docker containers, writing Dockerfile, and optimizing container images.
* **Version Control:** Git, GitHub
  + Familiarity with Git commands.
  + Familiarity with Managing GitHub repositories and secrets management.
* **CI/CD:** GitHub Actions, AWS CodePipeline
  + Familiar with workflows, actions, and secrets management to ensure secure and efficient deployment processes. I used it for the to-do application project.
  + Familiar with AWS CodePipeline to automate end-to-end software release processes. I used it to integrate with GitHub and S3 for my Tech Portfolio project.
* **Scripting and Automation:** Bash Scripting and Python.
  + Experience with using Bash scripting in conjunction with Cron jobs for scheduling tasks.
  + Familiar with Python libraries such as Boto3, for interacting with AWS services.
* **Operating Systems:** Linux (Ubuntu, Amazon Linux):
  + Comfortable with Linux command line, managing users and permissions.
  + Experience with package management (apt, yum), process monitoring (top, htop), and service management (systemctl).
* **Networking:**
  + TCP/IP, DNS, DHCP, Load Balancing.
  + Experience with Fortinet and Cisco suite of products.

**Transferable Skills:**

* **Technical Problem-Solving:** Developed strong troubleshooting skills through managing and resolving network and telephony issues in previous roles.
* **Project Management:** Experienced in planning, configuring, and deploying infrastructure projects, ensuring timely and efficient completion.
* **Collaboration and Communication:** Worked effectively in team environments and liaised with various stakeholders to ensure successful project outcomes.
* **Adaptability:** I quickly adapt to new technologies and environments, as evidenced by the successful deployment of both Cisco and Aruba network devices.
* **Customer Support:** Provided exceptional support to customers in all my previous roles, ensuring high levels of satisfaction and operational excellence.

**Projects:**

* **AWS Three-tier Architecture:** Deployed a highly available web application using AWS services including
  + Route 53 for DNS.
  + VPC for network isolation.
  + Auto Scaling Group for scalability.
  + RDS for database needs. RDS was just spun up as a necessary part of the infrastructure, no schema was defined.
  + Detailed design documented on [Medium.](https://medium.com/aws-in-plain-english/three-tier-web-application-d02730d6dc5e)
* **AWS Resource Tracker Using Shell Scripting:**
  + Developed a Bash script to automate resource health checks using AWS CLI.
  + Scheduled script execution with Cron Job.
  + Detailed description on [Medium.](https://medium.com/aws-in-plain-english/aws-resource-tracker-using-shell-scripting-590c253cb877)
* **CI/CD Pipeline for Tech Portfolio Website:** Implemented a CI/CD pipeline using:
  + AWS CodePipeline for continuous integration and continuous delivery.
  + GitHub as code repository.
  + Automating deployment to S3 with CloudFront for fast and secure content delivery.
  + DNS managed by Route 53.
  + SSL certification via ACM.
  + Project live at [Tech Portfolio.](https://www.singhincloud.net/)
* **To-do Application:** Built a basic to-do application using:
  + HTML, CSS and JavaScript for the frontend.
  + Containerized the application via Docker.
  + Built the image via Dockerfile using GitHub Actions workflow and finally deploying it on AWS.
  + AWS infrastructure created using Terraform.
  + AWS EventBridge Schedules to run the app server on a schedule – This has resulted in **31% cost saving**.
  + Detailed description on [Medium.](https://medium.com/aws-in-plain-english/deploying-a-web-application-on-aws-ec2-with-github-actions-running-on-docker-container-part-1-58d5d14f3f05)
  + App can be accessed over internet on [http://tech-stuff.online.](http://tech-stuff.online/)
* **FortiGate HA setup:**
  + Configured and implemented HA on FortiGate firewalls to ensure network redundancy, improve reliability, and minimize downtime, enhancing overall network resilience and performance.
* **Email Security Integration with Proofpoint**:
  + Implemented and configured Proofpoint as the primary email security gateway, integrating both Gmail and Exchange environments.
  + Optimized email flow by routing all traffic through Proofpoint for better security and minimal internal email filtering.
  + Managed domain MX record updates for modified email routing.

**Professional Experience:**

**System Administrator | VGW** (Oct 2023 – Current)

* Managing Fortinet suite of network equipment, including FortiGate Firewall, Forti Access Points, and Forti Switches.
* Onboarding SaaS applications and integrating Single Sign-On (SSO) with Okta.
* Managing AWS environment, including handling security alerts, spinning up new EC2 instances, and providing support.
* Managing and resolving issues related to Google workspace and Microsoft 365 environments.
* Ensuring automation is in place wherever possible. Automated logs deletion and certificate renewal on OpenVPN server running Ubuntu Linux OS and, automated Access points reboot on Sydney firewall. Both were done using bash script.
* Managing incidents, tasks and changes through Jira.
* Liaising with internal and external stakeholders on projects and communicating technical concepts to non-technical stakeholders, ensuring project alignment, understanding and delivery according to set deadlines.

**Network Administrator | Eagers Automotive** (Nov 2020 – Oct 2023)

* Deployed Cisco IP telephony infrastructure and configured Cisco and Aruba network devices.
* Managed IP telephony issues and network troubleshooting, enhancing technical problem-solving skills relevant to cloud networking.
* Supported IP telephony issues nationally and troubleshot network issues related to Cisco and Aruba deployments.

**Network Engineer | Datacom** (Feb 2020 – Aug 2020)

* Assisted in incident management and troubleshooting Cisco LAN issues, providing a strong foundation in network management.

**Voice Engineer | Automotive Holdings Group** (Sept 2019 – Nov 2019)

* Configured Call flows and IVRs on Cisco Collaboration platforms, demonstrated attention to detail and technical precision.
* Incident management through ServiceNow.

**Orange Business Services** (May 2014 - Aug 2019)

* **Incident Management Senior Specialist**

Oct 2016 - Aug 2019 | Gurgaon, India

* Central support role for ~100 customers, providing Level 2 technical support for voice-related issues.
* Specialized in Cisco platforms: CUCM, CUC, UCCX, UCCE, and calling endpoints.
* Key skills: Cisco Call Manager, Cisco IOS, Cisco Unity, Cisco IPCC, and other Cisco Systems products.
* **Senior Specialist**  
  Oct 2015 - Sep 2016 | Gurgaon, India
* First point of escalation for BHPB project issues.
* Ensured continuous communication with stakeholders through regular updates, calls, and meetings.
* **Specialist**  
  May 2014 - Sep 2015 | Gurgaon, India
* Supported Cisco LAN/WAN and IP telephony issues for the BHPB project.
* Managed Level 1 incident resolution while maintaining operational excellence.

**Education:**

Bachelor of Electronics and Communication

Amity University, India

**Certifications:**

* AWS Certified Solutions Architect – Associate.
* HashiCorp Certified Terraform Associate.
* ITIL.