Harneet Grewal

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CERTIFICATIONS & SKILLS

- **Certifications:** AWS Certified AI Practitioner, AWS Certified Solutions Architect - Associate, Kubernetes and Cloud Native Associate, Security+ CE, and Active DOD Clearance.
- **Skills:** Cloud platforms, ; AI/ML; Infrastructure as Code; CI/CD Pipelines; Scripting Languages; Operating Systems; Security and Compliance; Networking; Container & Orchestration; Monitoring & Logging; Version Control; Team Collaboration; Problem Solving; Leadership

WORK EXPERIENCE

Senior Cloud Engineer | Finch AI   **2019 – Present**

- Converted manually created infrastructure which was partially created with Cloudformation into Terraform for 6 environments. The infrastructure included 5 containerized services deployed on ECS along with supporting resources like pipelines.
- Perform monthly deployment to six environments including production to patch security vulnerability and to release new application features.
- Built pipelines with Infrastructure as Code (IaC) frameworks (AWS CDK, Terraform) to automate the container image building, testing and deployment that were used by six microservices. The implementation enhanced the reliability of the processes and eliminated manual processes.
- Consolidated 20 codecommit repositories, pipelines, and codebuild projects spread across various AWS accounts to a single pipeline to streamline the cross account application deployment from the management account.
- Migrated 200 plus bitbucket repositories to gitlab which were then shifted to codecommit for cost optimization purposes using APIs for the respective platforms via python and bash scripts.
- Remediate Qualys findings on a constant basis regarding AWS infrastructure and Linux OS by scripting changes via python, bash, and Terraform modules in 5 AWS accounts, including:
  - Over 150 codebuild projects upgraded to the latest base images.
  - Migrated 400 lambda functions to use best practices such as unique IAM role, tracing enabled.
- Setup Jenkins pipeline to build docker images that migrated to AWS native CI/CD solution later which eliminated maintenance overhead and improved integration with other AWS services.
- Converted manually created infrastructure which was partially created with Cloudformation into Terraform for 6 environments. The infrastructure included 5 containerized services deployed on ECS along with supporting resources like pipelines.

Tech Lead / AI Platform Engineer | Cognitive Care   **2022 – 2022**

Consulting

- Led a team of 5 engineers.
- Led cloud architecture and security improvements by implementing a highly available VPC and VPN, enhancing the organization's security posture by enforcing password policy, MFA, and encouraging the usage of IAM roles.
- Researched and recommended Amazon Sagemaker as the optimal machine learning solution based on data scientist requirements, driving adoption of advanced AI/ML tools.
- Architected and deployed AWS Organizations to ensure that each environment operated within its own AWS account, promoting security and streamlined management.
- Set up a secure development environment on EC2 instances for six data scientists, hosted within a private subnet and accessible exclusively via VPN, using Ansible.
- Deployed and configured Amazon Sagemaker notebook instances, including custom environments with specialized packages and R, to meet specific data science needs.
- Trained users on cloud tools and workflows, ensuring smooth adoption and efficient use of Amazon Sagemaker

and associated AWS services.
- Simplified Sagemaker access and user onboarding by integrating AWS Single Sign-On (SSO), streamlining the process for new users and improving overall usability.

Devops Engineer | The Common Application   2018 – 2019
- Developed 10 custom code as compliance rules in python using AWS Config and Lambda services to improve security compliance which were deployed using Cloudformation templates.
- Automated the golden image creation process and server patching with Ansible, Packer and Codebuild to save over 20 hours per month for the team.
- Migrated from Openvpn-AS (paid) to Openvpn Free version to save licensing cost and to eliminate other legal obligations such as deploying multiple instances of the software.
- Monitored the production environment and troubleshot to resolve issues reported by cloudwatch, Sumologic and Idera alerts/alarms.

Systems Engineer | Softconcept Inc   2016 – 2018
VCE/BUMED/DOD
- Oversaw three projects throughout their Software Development Lifecycle (SDLC) where developed and executed user acceptance test (UAT) plan to ensure newly developed system features were aligned with the documented user requirements that met Vision Center of Excellence (VCE/DOD) standards.
- Patched 10 linux and 4 windows operating systems hosted on Microsoft Hyper-V along with Cisco network stack every quarter to maintain the security posture.
- Tracked assets for various acquisition programs, obtained renewals/new quotes from vendors and alerted acquisition specialists on upcoming renewal/procurement ahead of time.
- Created and administered sharepoint sites for 4-8 teams for collaboration with developers, testers and clients.

Network Operations Center Technical Engineer | Factset   2013 – 2016
- Monitored, identified, researched, documented, and escalated as required and resolved the following issues for 60000 application users and 8000 internal employees:
    o Remotely assisted application users with connectivity and account issues
    o Monitored internal and clients' networks to maintain optimal uptime, no packet loss, low latency and followed up with carriers to resolve any network deterioration.
    o Reset windows passwords and provided bitlocker pins retrieved from active directory (AD) for internal users.
- Made and ran ethernet and fiber cables, assembled all datacenter equipment such as servers, routers, and switches, to regularly expand the data center to meet the increasing demand for resources.

EDUCATION

Bachelor of Science, Software Development and Security | University of Maryland   2019

Associate of Science, Computer Science | Northern Virginia Community College   2015

INTERESTS
- Real Estate; Long Road Trips; Growing Vegetables.