Nicholas Skoretz

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Skills

AWS Terraform (IaC) Python Ansible

Agile New Relic PagerDuty Zero Trust Access

Product Integration CI/CD Kubernetes (EKS) Automation

Microservices Cloud Architecture Linux/Bash Docker

Experience

Cloud Infrastructure Engineer, Caseware International

May 2021 – May 2023

Toronto, Ontario

- Reduced a six-day, manual copy process owned by our team into a sub-24-hour **automated pipeline** by investigating, designing, implementing and testing an automated solution comprising of GitHub Actions, **Packer**, **Ansible**, **Terraform SDK** and Python.
- Led implementation of Privileged Access Management tool, **StrongDM**, to 6 development and operations teams across the company, enabling instant, auditable, revocable **Zero Trust Access** to the resources developers require.
- Empowered developers for faster incident management by creating and using an **Ansible Role** and **automation pipelines** that configured **Zero Trust Access** to ~850 servers, ~20 **Elastic Kubernetes Service (EKS)** clusters, internal websites, databases and AWS Cloud.
- Was primary liaison between Caseware and StrongDM, communicating with the StrongDM Product and Development teams to track improvements, goals, and new features for Caseware. To learn more about my **product integration**, read my Customer Story with StrongDM.
- Developed two middlewares using webhooks and **Python** in **AWS Lambda**. The first middleware integrated StrongDM with **Jira** so access could be granted and revoked based on ticket assignee. The second integrated StrongDM with **PagerDuty** to grant emergency access to critical development resources to first responders, with access revoked automatically after the incident.
- Deployed and maintained a scalable, highly available service of StrongDM gateways to enable access to EC2
 instances internal to Caseware. Also deployed New Relic services to Kubernetes clusters to monitor and collect
 logs for other microservices.
- Designed solutions that resulted in **cloud cost savings**. For example, I used my **incremental automation** library to automate the deletion of Snapshots and unattached **Elastic Block Store (EBS)** Volumes, and automatically upgraded EBS Volumes from gp2 to gp3.
- Responded to infrastructure incidents, identified fixes and root causes and escalated where necessary while on a **24/7 on-call** rotation schedule. I also used **Terraform IaC** to develop **New Relic** dashboards and **alerts** to empower the development teams' 24/7 incident response and monitoring.
- Was the **Scrum Master** and led **Agile sprints** when team lead was away, defining requirements and creating tickets, running planning, retrospective and review meetings.

Toronto, Ontario

- Won the 2020 BComp Ian Pavlinic Memorial Co-op Student of the Year Award for my dedicated work on Caseware's **New Relic** roll-out, which included designing **Ansible playbooks** to install and configure hundreds of production servers with **monitoring** agents, as well as setting up the sub-account structure and user hierarchy.
- Led the communication between **New Relic (NR)** and Caseware to determine the latter's requirements and implementation strategy for NR's monitoring technology. This included communicating with NR to direct the development of their Automated User Management functionality for **Azure AD**.
- Created CI/CD pipelines for Python, Java, and NodeJS microservices that integrated Git, AWS CloudFormation and EKS. On Git push the pipeline provisioned dependent cloud infrastructure and the microservice was tested and built.

Automation Engineer Co-op, Symcor

May 2019 - Aug 2019

Mississauga, Ontario

- Developed **Ansible Tower jobs** that **automated various tasks** involved in a critical production server fail-over process, turning a 26-step manual process involving three teams into a more straightforward process that one can direct from Ansible Tower's web front-end.
- Created and contributed to an internal **Ansible Role and Plugin repository** to facilitate code sharing across Symcor. I also created and presented four "Ansible Clinics" for other co-op students, teaching them the basics of Ansible and **process automation** using the roles in the repository.
- Coordinated with other teams to develop an **end-to-end automation** for Symcor's Ad-Hoc DVD Burn process that integrates with UIPath and **Service Now**, reducing process time from five days to under 24 hours.
- Became proficient with various enterprise-level **APIs** (Service Now, JIRA, Secret Server, Ansible Tower) interacting with them to develop practical automation pieces. Having an automation trigger when a specific type of Service Now ticket was opened improved the ticket response flow for teams.

Data Developer Co-op, Symcor

May 2018 - Apr 2019

Mississauga, Ontario

- From idea to prototype, developed a web application in **Vue/JavaScript** that tracked and visualized employee-toemployee recognition at Symcor. The web app and accompanying recognition system won our team 2nd place at the Annual Innovation Challenge, judged by VPs at Symcor.
- Managed an **enterprise database system** that tracked the health and status of over 200 applications and infrastructure pieces. Developed new functionality in the corresponding web app to output information in .docx format, which was then collected in a printed book delivered to stakeholders.

Education

Bachelor of Computing, Software Engineering (Co-op)

2016 - 2021

University of Guelph

- Minor in Hispanic and Spanish Studies.
- Recipient of the 2020 BComp Ian Pavlinic Memorial Award Co-op Student of the Year.
- Dean's Honour List, 2016 2021.