KHALID KANA'AN SOFTWARE ENGINEER





EXPERIENCE

DevOps Software Developer

Health Canada

Sept 2022 - May 2024 340 Legget Dr. Kanata, ON

- Led research and initial deployment of Azure Kubernetes Service (AKS) cluster using Terraform and Azure DevOps, optimizing resource usage and exploring networking options for seamless connectivity and secure access.
- Researched Azure Key Vault and employed secure files feature in Azure DevOps pipeline for managing pipeline secrets.
- Configured Docker installation in Azure DevOps pipeline to achieve seamless interaction with Artifactory Docker registry.
- Enhanced DevOps Jenkinsfile template to include Health Canada mandatory elements, specified agent types, explained credential retrieval, documented **post-condition blocks**, and integrated logic for **Docker image** cleanup.
- Developed Bash scripts set to run periodically via Jenkins to back up MongoDB databases and delete outdated volumes.
- Developed the Health Canada 'JiraCSV Genie' application using .NET framework and C#, enabling seamless automation of Jira tasks through user-controlled **PowerShell** script execution and **CSV** generation.
- Led the end-to-end development lifecycle of a Full-Stack React application for surveying at Health Canada, utilizing HAproxy, MySQL, Node.js, and React.
- Authored the comprehensive Employee and Student onboarding documentation within the DevOps Internal Confluence **space**, providing clear guidance for new hires through our organization's onboarding process.

Junior DevOps Engineer

Interac Corp.

Dec 2021 - Aug 2022 1600 Carling Ave, Ottawa, ON

- Wrote the Conceptual Solution Design (CSD) for implementing and migrating the internal Docker registry to Artifactory.
- Developed Jinja2 templates to generate application configurations and extract TLS certificates from the Ansible vault, seamlessly integrating them into the operational Docker containers of internal applications.
- Utilized Bamboo for continuous integration and deployment, automating application deployment to different environments.
- Streamlined deployment processes for internal services by leveraging Ansible for containerized deployment, updating ansible playbooks to align with company provisioning and deployment standards.
- Transformed internal Python Flask MSS web application, leveraging Consul API for configuration file ID retrieval and decoding to allow authenticated users to view configuration file contents.

RECENT PERSONAL PROJECT

Educative Cybersecurity Webapp

Sep 2023 - Present

- Currently working on a Full-Stack React application for Cybersecurity awareness suitable for audience ages 12 and above.
- I am using **React** for the Frontend, **Express** for the backend, and a **MongoDB** database. Can demo app during interview.

EDUCATION

Bachelor of Software Engineering Co-op Option

Sep 2018 - June 2024

Carleton University

SKILLS

Languages: Java, Python, C++, C#, JavaScript, Typescript, HTML, CSS, PHP, C, Bash, PowerShell, Racket, MATLAB, Groovy, SQL, NoSQL

Frameworks & Libraries: .NET, Node.js, Express, React.js, Jest, Angular, Spring Boot, Hibernate, Flask, PyTorch, scikit-learn, virtualeny, PostgreSQL, MySQL, MongoDB, Web Experience Toolkit (WET)

Concepts: Experience with Agile and DevOps Methodologies, CI/CD, IaC, Containerization and Orchestration, Configuration Management, Scripting & Automation, Cloud Computing with Azure, Networking fundamentals, Cryptography, Machine Learning, Object-Oriented Programming, Algorithms and Data Structures, RESTful Design, Cloud Native, UX/UI design

Developer Tools: Git, SVN, GitHub, Bitbucket, Jenkins, Ansible, Terraform, Docker, Kubernetes, Jira API, Confluence API, Docker, Kubernetes, Azure Services, AWS, VS Code, Visual Studio IDE, Eclipse, IntelliJ