Colton Herrod

Staff Engineer, Cloud Engineering

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PROFESSIONAL EXPERIENCE

Bayer – *Staff Engineer, Cloud Engineering*

Aug 2022 – Present
- Designed, developed, and implemented an Azure Enterprise-Scale landing zone.
- Designed and developed internal-source Terraform modules for utilization within Azure.
- Collaborated with Azure developers to facilitate the migration of ad-hoc code and ClickOps to internal-source Terraform modules.
- Collaborated with other Staff and Senior Staff Engineers on AWS re-architecture initiatives, including the design of a new landing zone, the automation of service-based account creation, the development of an initial stable of internal-source Terraform modules, and the assurance of security and legal compliance.
- Maintained, updated, and enhanced a stable of supporting services, including an organizational service metadata store, consolidated service view, log aggregator, and various AWS utilities.
- Participated in an on-call rotation to address issues related to CloudEng-owned and other downstream services.

DTN – *DevOps Manager*

Jan 2021 – Aug 2022
- Managed a team of 7 responsible for maintenance of existing legacy tooling and future DevOps platform implementation, including the below:
    - Led team in evaluation and selection of CI/CD automation tooling for DTN.
    - Worked with development teams to proof out CI/CD tooling capabilities.
    - Led team in development of organization Kubernetes CI/CD standards.
    - Investigated, purchased, and implemented Terraform Cloud for the DTN organization.
    - Converted multiple applications' infrastructure from CloudFormation to Terraform.
    - Worked with DTN security team to report on and plan resolution of Log4J vulnerability.
- As DevOps team lead, ran an organization-wide DevOps Service Desk, aiding with AWS development, CI/CD automation, infrastructure debugging and AWS architecture
    - Team met >90% of first response SLAs and >70% resolution time SLAs
- Implemented and maintained Agile processes on team, including:
    - Provided guidance, training, and mentorship to team members with limited prior experience in Agile methodologies.
    - Built and maintained team backlog, working with team to plan sprint work.
    - Collaborated with the team to transition Scrum workflows to Kanban, thereby enhancing the support desk workflow and aligning it with the innovation workflow.
- Provided technical expertise for development teams during AWS migrations and re-architectures.

DTN – *DevOps Engineer*

April 2020 – Jan 2021
- Automated build and deployment of commercial-off-the-shelf (COTS) applications in AWS.
- Revamped on-premises COTS application to ensure high availability in AWS environment.
- Contributed to the implementation of Artifactory Cloud as the central repository for all deployment artifacts, including Docker images and Conda packages.
- Developed comprehensive end-to-end AWS examples tailored for developer utilization, encompassing CloudFormation templates and Bamboo build and deployment pipelines.
- Acted as AWS technical expert for development teams during migrations to AWS.

Pariveda Solutions – *IT Consultant*

August 2015 – April 2020
- Developed a Yeoman tool that enables application teams to quickly create a new application consisting of a Vue front-end, .NET Core back-end, and the AWS infrastructure required for running the application.
- Designed and implemented an end-to-end DevOps solution within the AWS environment as part of a modernization initiative. This encompassed the establishment of DevOps technical processes, a branching strategy, and the development of infrastructure and application deployment pipelines.
- Architected enterprise-class AWS Landing Zone as modernization initiative.
- Developed an implementation roadmap for the DevOps and Landing Zone architectures outlined above to facilitate the construction of a company's three-year modernization plan.
- Automated AWS DevOps processes including account creation, deployment of detective and corrective controls, and creating cross-account VPN tunnels.
- Developed infrastructure deployment pipeline with CloudFormation and Jenkins.
- Assisted in migrating an on-premises data center into AWS for a Fortune 500 company, with responsibilities including developing and maintaining the configuration management stack and infrastructure deployment process, including:
    - The development of an entirely automated pipeline for deploying Windows servers into AWS utilizing infrastructure-as-code principles.
    - The development of an entirely automated pipeline for the deployment of Windows applications to Windows servers within the AWS environment.
    - The development of Chef configuration management scripts utilizing Ruby and PowerShell for the administration and maintenance of AWS Windows servers.
- As a Lead Developer, spearheaded the initial AWS environment development for a cloud migration project. My responsibilities encompassed networking infrastructure automation, application deployment automation, and overall project management.
- Developed a C# back-end API for a social networking mobile application, incorporating a SQL-based geolocation system capable of accommodating 15,000 concurrent users.
- Spearheaded performance testing efforts on a back-end application API, identified major application bottlenecks, and resolved performance issues.
- Collaborated with a cross-functional team to develop a conceptual framework for a proposed cloud architecture, tailored to the specific requirements of a prominent commercial real estate organization.

American Fidelity Assurance – *Software Development Intern*

July 2014 - May 2015

- Assisted in developing an iPad application used by field representatives using C#, AngularJS, and HTML
- Developed an AngularJS-based website to display and monitor application metrics and logs.
- Migrated data between CRM systems, from SalesNow to SalesForce.

EDUCATION

University of Oklahoma - *Management Information Systems*

Graduation: May 2015

CERTIFICATIONS

AWS Certified Solutions Architect – Professional
March 2018 — March 2021, March 2022 — March 2025

AWS Certified Solutions Architect – Associate
December 2015 — March 2021, March 2022 — March 2025

AWS Certified DevOps Engineer – Professional
Expired: December 2019 — December 2022

Certified Scrum Master
Expired: March 2021 — March 2023

Hashicorp Certified – Terraform Associate
Expired: January 2022 — January 2024

SKILLS

Languages: CloudFormation, Hashicorp Configuration Language (Terraform), Python, NodeJS, Bash/PowerShell, Golang

Tools: AWS, GitLab, Terraform Cloud, Azure DevOps, Bamboo, Bitbucket Pipelines