
JACOB BULLOCH - DEVOPS ENGINEER

(575) 607-5483 • JPBulloch@pm.me • [Web-Based Resume](#)

Coding Experience

- Azure DevOps - 9mo
- Java - 3mo
- Python - 3mo
- Git - 6mo
- Ansible - 3mo
- Docker - 6mo
- PostgreSQL - 3mo
- Azure - 3mo

Projects

Cluster of Cards

07/2021

[Azure DevOps Repo](#)

Description:

An existing Java application is augmented with tooling to support Agile values in a DevOps workflow with CI/CD. The servlet-based application exposes simple CRUD operations using a custom ORM library that's versioned and published from a separate code repository. A project board, containerization, static analysis, and documentation contribute to short feedback loops and higher product quality.

Roles/Responsibilities:

DevOps Engineer

- SDLC - Built and maintained Agile project board in ADO
- Infrastructure - Setup Azure Resource Group (ARG), Azure Container Repository (ACR), and Azure Kubernetes Service (AKS)
- CI - Built mono-repo ADO pipeline to containerize each microservice
- Containerization - Built containers for each microservice; networked and tested
- Orchestration - Built Kubernetes cluster to utilize containerized microservices as a cluster
- CI/Analysis - Add mono-repo sonarCloud analysis to the CI pipeline
- CD - Created AKS deployment environment in ADO
- CD - Automate deployment of each microservice to AKS in CD pipeline
- IaC - Synchronize ADO pipeline versioning from microservice pom.xml files

Tools/Technologies:

Azure DevOps, Docker, PostgreSQL, Ansible, Java, Tomcat, Git, SonarCloud, Bash, SSH

Description:

An existing Java application is augmented with tooling to support Agile values in a DevOps workflow with CI/CD. The servlet-based application exposes simple CRUD operations using a custom ORM library that's versioned and published from a separate code repository. A project board, containerization, static analysis, and documentation contribute to short feedback loops and higher product quality.

Roles/Responsibilities:

DevOps Engineer

- SDLC - Built and managed Agile project board
- VCS - Adapted original Git Hub repo to Azure DevOps repo
- IaC - Implemented (IaC) to project VCS by storing/versioning CI/CD pipelines with the codebase
- CI - Built pipeline for custom ORM dependency
- CI - Built pipeline for packaging the WebApp WAR file
- Containerization - Designed multi-stage Docker build from Maven to Tomcat to encapsulate the WebApp
- CI - Automated containerization and push to Docker Hub from pipeline
- CI/Testing - Automated testing using Postman; runs developer-supplied tests
- CI/Analysis - Automated sonarCloud analysis for the CI pipelines
- CD - Setup ADO production environment rules to require authorization prior to deployment
- Automation - Automated message-sending via webhook to team Discord server; notifies when authorization is needed

Tools/Technologies:

Azure DevOps, Docker, PostgreSQL, Ansible, Java, Tomcat, Git, SonarCloud, Bash, SSH

Description:

A proof-of-concept implementation of a relational database is built programmatically by leveraging native data structures to mimic the behavior of an SQL database. Application testing, virtual environment configuration, and deployment to multiple virtual machines are automated.

Roles/Responsibilities:

Python Developer

- Coding/OOP - Build table object to mimic an SQL table
- Coding/OOP - Build keySet object to generate serial primary keys
- Coding/OOP - Build keyTable object to combine keySet and table objects
- Coding/OOP - Build AssetManagementTable as a case for a specific implementation of the keyTable object
- Scripting/Testing - Build CLI-driven tests
- Coding/OOP - Build a menu-driven terminal interface; design menu object for easy reusability in future projects

DevOps Engineer

- Automation - Build Ansible playbooks to provision the virtual environment
- Automation - Build playbook to automate testing the application
- Automation - Build playbook to deploy the application to several virtual machines at once
- IaC - Keep application code and automation infrastructure versioned together in Git Hub

Tools/Technologies:

Ansible, Git, Python, Bash, PowerShell

About Me

A mentor advised me to consider what I most enjoyed doing when I was 13 years old and find a job that does that. For me, that is coding! My experience with foreign language acquisition has helped me transition between programming languages and paradigms (e.g., BASIC, Haskell, C++, Java, Python).

DevOps Engineering leverages my ability to navigate between languages and my experience with process engineering. I focus on improving the process around the objective and the objective itself. I derive job satisfaction from removing roadblocks to deliver quality continuous integration and continuous deployment (CI/CD).

Interesting facts:

- I am Quadrilingual (English, Spanish, Korean, and Arabic)
- I run a mile most mornings to start my day
- I met my wife in a show-choir in college; we've been married for 13 years

Personal Git Repository: <https://github.com/jpbulloch5>

Work History

Military Outreach Coordinator

- 07/2018 – Present Eastern New Mexico University Portales, NM
- Mitigated critical issue from cohort benefit rule changes; prevented 80% loss by preemptive correction
 - Developed/implemented cohort statistical tracking; automated usable data analysis/output from raw data
 - Designed cohort student experience priorities; boosted enrollment 522% in 2 years with grassroots effort

Direct Support Operator; Team Leader

- 04/2015 - 07/2018 Air Force Special Operations Command Cannon AFB, NM
- Led team of 13; directed professional development, productivity, mission readiness, and compliance
 - Liaised between organizations; showcased capabilities/services via planning, exercises, and real missions
 - Developed training materials to cover deficit; boosted initial pass rate 25%; saved 160 person-hours

Section Leader: Foreign Language Acquisition Course

- 08/2013 – 04/2015 Air Education and Training Command Presidio of Monterey, CA
- Led six students in intense 18-month Arabic Language Acquisition Program; guided study habits/priorities
 - Developed supplementary Arabic Language training materials for students awaiting official class start
 - Coached section to 83% pass rate; 33% higher than expected 50% attrition rate; most successful section

Foreign Area Specialist: Analysis Operator

- 07/2011 – 08/2013 Air Combat Command Davis-Monthan AFB, AZ
- Briefed aircrews as Foreign Area subject matter expert; optimized mission effectiveness/crew knowledge
 - Translated, analyzed, and reported time-sensitive foreign language material; swift judgment calls required
 - Maintained sensitive military information in accordance with strict protocols; Top-Secret SCI clearance

Education History

BS – Computer Science

05/2021 Eastern New Mexico University Portales, NM
Graduated Magna Cum Laude

AA – Arabic

12/2014 Defense Language Institute Monterey, CA
Graduated with Honors

AAS – Intelligence Studies and Technology

07/2013 Community College of the Air Force Montgomery, AL

AA – Korean

10/2010 Defense Language Institute Monterey, CA

Additional Education Information

[ENMU Official Graduation Transcript](#)