David Spearman

Houston, TX | 470-883-0235 | dspearman@bwa.ai | https://resume.bwa.ai/

Technical Skills

Languages: Built backends and APIs with Python, JavaScript, and TypeScript. Automated CI/CD with Bash & PowerShell scripting.

Cloud: Managed cloud infrastructure on AWS (EKS, Lambda, DynamoDB, S3, CloudWatch) and DigitalOcean Kubernetes. Automated release pipelines with Terraform & Octopus Deploy. Monitored system performance and logs with Splunk for observability.

Databases: Engineered CRUD operations, stored procedures, and ETL pipelines in Snowflake, MSSQL, and Oracle PL/SQL, ensuring integrity across 3,000+ portfolios. Built scalable models and unstructured storage solutions with MongoDB & DynamoDB.

Tools & CI/CD: Automated builds and testing with Git, Bitbucket, GitHub, CircleCI, and TeamCity. Integrated Fortify, Prisma, and Whitesource for security scanning and compliance. Applied CI/CD and SDLC best practices to improve build, testing, and deployment reliability.

Professional Experience

Invesco | Advanced Software Engineer
Dec 2021 – Present

- Optimized ~$3B bank loan portfolio with Modern Portfolio Theory, reducing risk through automated validation.

- Built and maintained AWS Lambda/Snowflake ETL pipelines with Amazon MQ, converting batch workflows into serverless for 3,000+ portfolios, and troubleshooting failures to ensure reliable delivery.

- Provisioned AWS infrastructure with Terraform, deploying self-healing systems (Lambda, DynamoDB, DocumentDB, ElastiCache) that improved uptime and reduced incident recovery.

- Collaborated with QA, analysts, and ops to align SLAs with technical solutions.

Aaron's Inc | Sr. System Administrator
Jan 2021 – Dec 2021

- Managed CI/CD pipelines with Bitbucket, Octopus Deploy, and TeamCity, improving release speed and reliability.

- Automated compliance logging and security enforcement using PowerShell, reducing audit overhead.

- Administered Kubernetes clusters and optimized networking with F5 load balancers.

Mohawk Industries | Software Developer
Aug 2020 – Jan 2021

- Migrated COBOL financial applications to Python APIs, improving maintainability and performance.

- Built Azure automations for inventory tracking and data validation, reducing errors and manual work.

Certifications

- **AWS Solutions Architect – Associate** (2023)
- **AWS Certified Developer** (2023)

Portfolio Projects

- **Market Intelligence Dashboard** – Flask/Kubernetes app for real-time financial signals, sentiment, and portfolio risk insights. Transforming raw data and sentiment into a cohesive market overview.

- **Crypto Asset Analytics API** – Python API for time-series analysis, candlestick pattern recognition, and AI-aided insights, delivering asset-level narratives to 100+ daily users.

- **Real Estate Deal Analyzer** – Flask/Kubernetes app automating cash flow, ROI, and financing scenarios.

Full portfolio: resume.bwa.ai