CHRISTOPHER W. BOWN

Senior DevOps Engineer / Technical Leader

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PROFESSIONAL SUMMARY

Senior DevOps Engineer with 16+ years of experience designing, implementing, and managing CI/CD pipelines, cloud infrastructure, and Kubernetes environments. Proven track record of leading technical teams, optimizing cloud spending, and implementing automation solutions that improve deployment frequency and reliability. Highly skilled with AWS, Azure, Terraform, and Kubernetes with a strong background in security implementation and compliance.

Key achievements: $7.2M in cloud cost reduction over two years, 19,000% increase in deployment frequency over 4 years (45 to 8,896), and successful migration of 2200+ domains to Cloudflare WAF/CDN infrastructure.

CORE COMPETENCIES

- Cloud Platforms: AWS (EKS, EC2, S3, RDS, Route53), Azure (AKS, AppServices, Cloud Services).
- Infrastructure: Kubernetes, Docker, Terraform, Spacelift, HELM, FluxCD, Sealed Secrets.
- CI/CD & Automation: GitHub Actions, Azure DevOps, Jenkins, GitOps, Argo Workflow/Events.
- Monitoring & Security: Datadog, Splunk, PagerDuty, Cloudflare, Veracode, SNYK.
- Programming & Database: Python, PowerShell, Bash, C#, MSSQL, PostgreSQL, MySQL.
- Leadership: Team management, offshore coordination, project management, vendor negotiations.

TECHNICAL SKILLS

Technology	Prof/Yrs	Technology	Prof/Yrs	Technology	Prof/Yrs
AWS	★★★★☆ / 8+	Azure DevOps	★★★★☆ / 7+	PowerShell	★★★☆☆ / 16+
Azure	★★★★☆ / 9+	Jenkins	★★★☆☆ / 12+	Bash	★★★☆☆ / 16+
Kubernetes	★★★★☆ / 6+	GitHub Actions	★★★☆☆ / 5+	Python	★★★☆☆ / 5+
Docker	★★★☆☆ / 6+	FluxCD	★★★★☆ / 3+	C#	★★☆☆☆ / 8+
Terraform	★★★★☆ / 4+	Splunk	★★★★☆ / 10+	MSSQL	★★★★☆ / 12+
HELM	★★★☆☆ / 3+	Cloudflare	★★★★☆ / 10+	PostgreSQL	★★★☆☆ / 5+
Datadog	★★★☆☆ / 5+	Linux/Windows	★★★★☆ / 14+	MySQL	★★★☆☆ / 7+

Proficiency: ★ Basic, ★★ Working, ★★★ Advanced, ★★★★ Expert

KEY PROJECTS

Large-Scale Kubernetes Migration | Revolution Parts

- Challenge: Aging Rancher-based Kubernetes infrastructure causing stability issues and operational overhead.
- Solution: Designed and led migration of all workloads to AWS EKS.
- Impact: Reduced kubernetes related incidents by 90%, improved application performance by roughly 25%.

Enterprise CI/CD Transformation | Carvana

- Challenge: Slow, manual deployment process and blocking branching strategy that limited company growth with only 45 annual deployments.
- Solution: Architected complete CI/CD pipeline with Git and Azure DevOps, implemented infrastructure as code, and designed blue-green deployment strategy.
- Impact: Scaled deployment frequency from 45 to 8,896 over 4 years while maintaining 99.9% uptime, enabling rapid business expansion and allowing development teams to increase velocity and deploy to lower environments, test, deploy to production and rollback as needed.

Cloud Cost Optimization | Carvana

- Challenge: Rapidly increasing cloud costs threatening profitability as company scaled.
- Solution: Implemented comprehensive cloud governance, right-sizing strategy, reserved instance purchasing, and automated resource reporting.
- Impact: Reduced annual cloud spend by $7.2M over 2020 and 2021 without impacting performance or reliability, funding additional strategic initiatives.

PROFESSIONAL EXPERIENCE

REVOLUTION PARTS, Tempe, AZ Team Lead, Cloud Operations | May 2024 - Present

- Lead AWS infrastructure operations including EKS, EC2, S3 and networking components for a SaaS platform.
- Successfully migrated 2200+ domains to Cloudflare through automated scripts I developed, implementing secure tunnels between Cloudflare and EKS, and leveraged Cloudflare's platform to improve performance via CDN, protect websites from bad actors, and automate SSL/DNS management.
- Led migration from Rancher Kubernetes to AWS EKS, improving stability and reducing operational overhead.
- Implemented GitOps workflows with FluxCD and Sealed Secrets for application deployment, reducing time to production and human error.
- Created semi-automated incident response system using Datadog, PagerDuty, Slack, and Google Meet to establish virtual war-rooms, notify required participants, track outages, and streamline post-incident RCA documentation.
- Contracted with an Amazon Reseller to secure better reserved instance pricing and enhanced AWS support, optimizing cloud expenditure.
- Technologies: AWS (EKS, EC2, S3, Route53), Terraform, Spacelift, Cloudflare, Datadog, PagerDuty, HELM, GitHub Actions, Jenkins, FluxCD, Sealed Secrets, Python, Bash, Linux, Aurora PostgreSQL, MySQL, NGINX, Apache.

UPDATER, Remote Senior DevOps Engineer II | February 2022 - May 2024

- Migrated business-critical applications from VMware in two datacenters to AWS EKS with zero service disruption.
- Provided hands-on training to developers on Kubernetes configurations, HELM charts, and kubectl troubleshooting.
- Orchestrated database migration from MSSQL to PostgreSQL for .NET applications.
- Implemented Cloudflare tunnels to enhance application security in Kubernetes environments.
- Served as primary MSSQL expert while supporting infrastructure upgrades across the organization.
- Technologies: AWS (EKS, S3, RDS), Terraform, Spacelift, Kubernetes, HELM, FluxCD, Argo Workflow/Events, GitHub Actions, Datadog, Powershell, Bash, Linux, Windows, MSSQL, PostgreSQL, NGINX, IIS, VMWare.

CARVANA, Phoenix, AZ Principal Security Engineer | July 2021 - February 2022

- Selected security tools and developed a plan to integrate them with existing DevOps/CI/CD culture.
- Remediated DNS vulnerabilities by purging 8 years of DNS bloat to prevent domain takeover attacks.
- Established security requirements in collaboration with engineering leadership.
- Piloted and evaluated security solutions, fixing multiple high-severity CVEs in production code.
- Coordinated penetration testing with external security vendors and provided detailed reports to leadership and auditors.
- Technologies: Veracode, SNYK, Cloudflare, DYN, Splunk.

Principal/Lead DevOps Engineer | November 2015 - July 2021

- Built and led a diverse team of 14 DevOps engineers and 6 offshore contractors with industry-low attrition rates.
- Transformed deployment practices from 45 production deploys in 2016 to 8,896 in 2020 through CI/CD implementation.
- Migrated from VM hosting to App Services and eventually to a 3-region AKS infrastructure with canary/blue-green deployments.
- Implemented and managed Cloudflare to mitigate DDoS attacks and created custom automation for traffic filtering.
- Migrated application logging from MSSQL to Splunk, improving troubleshooting capabilities and visibility.
- Implemented Sonatype Nexus to store and distribute binaries, replacing manual download processes.
- Reduced cloud spend by $3.6 million annually in both 2020 and 2021.
- Wrote SOX compliance and change management policies and managed yearly audits.
- Technologies: Azure, AKS, Docker, ARM, Cloudflare, AppDynamics, App Insights, Datadog, Azure DevOps, Splunk, VictorOps, Windows, Powershell, Python, Bash, Linux, NGINX, IIS.

AMERICAN EXPRESS, Phoenix, AZ Lead Programmer Analyst | October 2008 - November 2015

- Developed and supported enterprise-scale build systems handling 300,000+ builds monthly.
- Designed custom Jenkins plugins for .NET builds before they were commercially available.
- Pioneered and executed the first automated deployment in American Express history.
- Migrated build tools from Maestro/Archiva/SVN to Jenkins/Nexus/Git.
- Introduced Splunk for build system monitoring, leading to company-wide adoption.
- Developed tooling to standardize .NET application builds using Maven-inspired workflows.
- Successfully advanced from contractor to FTE based on performance.
- Technologies: Jenkins, Maven, Nexus, Git, Splunk, Veracode, AppScan, .NET Frameworks, Powershell, Bash, RHEL, Java, Subversion, VMWare, Apache.

AD FORESIGHT, Phoenix, AZ VP of Technology / Director of Information Systems | August 2000 - October 2008 Technologies: VB.Net, C#, WMI, Windows Server, MSSQL, IIS.

EDUCATION

Bachelor of Science in Computer Information Systems
 DeVry University, Phoenix, AZ (2000-2002)

CERTIFICATIONS

Kubernetes Certified Administrator (CKA) - In progress, expected completion July 2025.