

Christopher W. Bown

TECHNOLOGIES AND SKILLS

Current Technologies/Skills:

- 5 years - Python
- 16 years - Powershell, Bash
- 2 years - Markdown
- 12 years - Database (MSSQL, Postgres, MySQL)
- 8 years - Cloud (Azure, AWS)
- 16 years - CI/CD (Github Actions, Azure DevOps Jenkins)
- 4 years - Infrastructure as Code (Terraform, Spacelift, ARM)
- 6 years - Kubernetes, Docker
- 3 years - HELM
- 10 years - Cloudflare
- 22 years - DNS
- 16 years - Log Management and Alerting (Splunk, Datadog, PagerDuty, AWS Cloudwatch)
- 22 years - Microsoft Windows/Windows Server Administration
- 14 years - Linux Administration
- 15 years - Network design and administration
- 14 years - Agile, Scrum, Kanban
- 17 years - Team management, team building and employee development
- 12 years - Offshore team management
- 20 years - Vendor management
- 24 years - Project management

Previous Hands on Experience with:

- 1 years - GoLang, Rust
- 12 years - .Net experience (C#)
- 12 years - HTML, JavaScript, CSS
- 6 years - unit testing/quality tools (NUnit, MSTest, Junit, Sonar, Selenium, TestNG, SauceLabs)
- 12 years - security tools (Synk, Whitehat, Veracode, Trustwave App Scanner (Cenzic Hailstorm), IBM Appscan)
- 2 years - Prometheus, Grafana
- 10 years - Profiling tools - App Dynamics, App Insights, New Relic
- 10 years - Telecom management, traditional PBX systems and VoIP systems

PROFESSIONAL EXPERIENCE

Revolution Parts, Tempe AZ – *Team Lead, Cloud Operations*

May 2024 - Present

- Led a team of 5 including 1 FTE, 3 offshore contractors and 1 intern for a 3 month period
- Led, planned and worked with the team to execute the migration from a Rancher Kubernetes cluster hosted on EC2 to an EKS cluster in AWS
- Led multiple projects designed to increase stability of the platform
- Led projects designed to increase automation and reduce the amount of manual intervention required to do day to day work on the team

- Led, planned and executed the migration from an NGINX proxy and open source WAF layer to Cloudflare for ~1700 hosted sites. Including securing traffic from Cloudflare to EKS via secure tunnels.
- Led and executed numerous projects to increase monitoring and improve monitoring to identify infrastructure and code issues before they impacted customers.
- Implemented GitOps for applications the CloudOps team owns to further improve automation and time to production.
- Worked across teams to improve monitoring and update on-call schedules
- Worked across teams to identify and fix application issues.
- Updated policies and performed audits to facilitate PCI and SOC-II compliance
- Responsible for reporting and containing our cloud and tool spend each month.
- Technologies Used: Terraform, Terraform cloud, Spacelift, Jira, Confluence, Datadog, PagerDuty, AWS, EKS, HELM, Github, Github Actions, Jenkins, Ansible, Cloudflare

Updater, Remote – *Senior DevOps Engineer II*

February 2022 – May 2024

- Worked with the application team to migrate their applications to Kubernetes. Trained developers on how to create and modify kubernetes configs, HELM charts and troubleshoot their apps with kubectl
- Worked hands on with development teams to migrate business critical applications from VMWare in a data center to EKS in AWS on the first try within a standard outage window.
- Worked hands on across teams to migrate .Net applications from MSSQL to Postgres
- Supported and upgraded business application infrastructure as well as developer tools
- Hands on with the rest of the team to migrate our terraform workspaces to spacelift.
- Implemented Cloudflare tunnels to secure the applications in kubernetes.
- Primary MSSQL expert for the company.
- Hands on with development teams implementing Argo Workflows and Events
- Technologies used: Terraform, AWS EKS, S3, RDS, Postgres, MSSQL, Linux, Windows, Github, Github Actions, Spacelift, Data Dog, VSCode, Bash, Python, Jira, Confluence, OpsGenie, CI/CD, Spacelift, Postman, Docker, Kubernetes, HELM, FluxCD, Argo Workflow/Events, VIM, NeoVIM, Lazy, Jira, Confluence, WIZ, Agile, Kanban

Carvana, Phoenix AZ – *Principal Security Engineer*

July 2021 – Feb 2022

- Moved to the Security role to build a team and tooling to better secure Carvana's code, infrastructure and implement it with the existing DevOps/CI/CD tools and culture.
- Took over DNS for the company and purged 8 years of DNS bloat to avoid domain take over attacks.
- Created requirements with Engineering leadership as well as leaders outside of the Engineering Org and piloted a number of solutions.
- During the pilot phase we were able to fix a number of high severity CVE's in the code base.
- Selected a tool and was in the process of negotiating the contract when I moved to Updater.
- Technologies used:, Veracode, Cloudflare, DYN, Splunk, VSCode

Carvana, Phoenix AZ – *Principal/Lead DevOps Engineer*

November 2015 – July 2021

- The first DevOps Engineer hired, employee 203.
- Built a team of 14 DevOps Engineers and 6 offshore contractors
- Mentored the first Engineering intern at Carvana as well as 6 more over my tenure as Lead
- Completed bi-annual reviews and yearly promotions
- Completed bi-monthly 1:1's.
- Managed a yearly cloud budget of ~\$6 million a year.
- Mentored team members with no previous DevOps experience.
- The team and Implemented DevOps methodologies and a strong DevOps culture. The team adopted and implemented an internal culture of "work smarter not harder" and "code your way out of a job".
- The DevOps team was the most diverse team at Carvana with the lowest attrition rate.

- Negotiated contracts with vendors
- Implemented CI/CD, 45 production deploys in 2016 and 8896 in 2020
- Moved from VM (Azure Cloud Service) hosting to more dynamic App Services and eventually Kubernetes (AKS) in Azure.
- Designed and worked with my team to implemented HA as well as canary/blue-green deploys with a 3 region AKS infrastructure.
- Moved application logging from MSSQL to Splunk
- POC'd and implemented monitoring and profiling with a variety of tools over the years, AppDynamics, App Insights, Data Dog. Found a code execution issue that had been plaguing the system for years and patch it in my first 90 days using AppDynamics.
- Migrated from a third-party hosted TFS and TFVC install to Azure DevOps and GIT.
- Designed and implemented agile processes while maintaining regulatory compliance
- Wrote the SOX compliance change management policy and completed the yearly SOX audit
- Mitigated numerous DDoS attacks with tools such as Cloudflare and Incapsula
- Automated traffic filtering with Cloudflare to filter scanners and bots (before CF offered a solution)
- Supported 300+ developers.
- POC'd, designed and implemented various security code scanning tools, Veracode, Whitehat, SNYK as well as bi-annual pentests with Whitehat.
- Piloted a developer security training program using Veracode. It ended up not going to production because of other priorities but was successful as a pilot.
- Managed the on-call schedule
- Personally cut \$3.6 million a year from the cloud spend in both 2020 and 2021.
- Technologies used: Splunk, VictorOps, Azure, ARM, Cloudflare, AppDynamics, App Insights, Data Dog, Azure DevOps, Git, Visual Studio, VSCode, AKS (Kubernetes), Docker, Python, Powershell, Bash, Jira, Confluence, Linux, Windows, Mac, Veracode, Whitehat, SNYK, Networking, Agile, Kanban

American Express, Phoenix AZ – *Lead Programmer Analyst*

August 2009 – November 2015

- Supported .Net Build and worked to create a Maven based system to build .Net
- Supported Maven, NPanday, Archiva and SVN
- Migrated build tools to Jenkins, Nexus and GIT
- Wrote custom Jenkins plugins for .Net build, they didn't exist at that time.
- Supported all of the Java, .Net and mobile developers at Amex.
- Supported over 300,000 builds a month
- The team completed the first CI/CD process at Amex
- Some of my Jenkins code is still being used to deploy .Net apps.
- Brought Splunk into Amex as a pilot and ran it for years on our infrastructure to monitor and debug the build systems. It was so successful that Amex adopted Splunk as a standard tool.
- Worked with the Security team to pilot, implement and support numerous developer focused security tools.
- Mentored new team members
- Interviewed and help with hiring decisions
- Worked with American Express CISO to pick tools to scan source code
- Technologies used: Maven, Apache Maestro, Apache Archiva, Subversion, Git, Sonatype Nexus, Jenkins, Java, C#, Bash, Redhat, Cenizic, Splunk, AppScan, Veracode, VMWare, Visual Studio, .Net Frameworks, Agile, Kanban, Jira, Confluence

CDI/American Express, Phoenix AZ – *Senior .Net Developer*

October 2008 – August 2009

- Hired as the .Net SME to build a tool set that would allow .Net applications to build like Java applications did with Maven
- Worked with all of the .Net Teams across American Express
- Worked 3 months on location in Miami Florida with a .Net team to help the migrate from emailing DLL's around to using build and a binary repository to deploy their applications.

- Converted from a contractor to an FTE in August of 2009

Ad Foresight, Phoenix AZ – *Programmer/Principal Engineer/Director of Information Systems/ VP of Technology*

August 2000 – October 2008

- Designed, programmed and implemented custom blogging and social networking system that hosts more than 5,000 blogs getting 100,000+ unique visitors per day using .Net technologies to automate customer onboarding with CRM, blog setup (DNS, IIS, Database and other systems), integration of sharing and social media tools with WebServices, automated DNS and IIS setup.
- Managed a team of 20 developers, 5 support staff and an offshore team. Hired and mentored new employees. Provided employees and offshore resources with feedback and work assignments.
- Designed, programmed and maintained a patent pending system to spider a site and automatically create navigation sitemaps. Written in VB6 and later upgraded to VB.Net and then C#.
- Completed multiple website and e-commerce projects as a member of a small team for small businesses to fortune 500 companies using a variety of Web, .Net and open source technologies.
- Spearheaded the move of the company's hosting platform to a modern system that increased site availability, better customer satisfaction and decreased hosting costs by 30-60% per site hosted. Provide 24x7 support for our customers.

EDUCATION

2000-2002 Bachelors of Science in Computer Information Systems
DeVry University
Phoenix, AZ

LINKS

Github - <https://github.com/cbown75>

LinkedIn - <https://www.linkedin.com/in/christopherwbown/>

HOBBIES

- Playing guitar
- Wood working
- Traveling
- 3D Printing