

PATRICK BREWER

pwbrewer@me.com - 919-386-9218 - <https://www.linkedin.com/in/pabrewer/>

PROFILE

Over 20 years of experience as software developer, system engineer/admin. Currently focused on devops/architecture in AWS. Always searching for ways to improve performance and efficiency of systems and processes. Broad experience and skills allows problem solving from multiple perspectives.

SKILLS

CLOUD

AWS Certified Solutions Architect - Associate certified

iFIT - Create multiple pools of self-hosted GitHub Runners in AWS for x86 & ARM based development. AWS Cost optimization, including finding and removing unused resources. Proposed Datadog logging strategy to provide best cost/usefulness compromise. Completed AWS's "Advanced Architecting on AWS" training class.

Cengage - Wrote lambda to send monitoring events from AWS CloudWatch using SNS to Slack. Set up auto-scaling AWS Elastic Container Service cluster (Docker) to run Jenkins CI/CD jobs. Use spot instances to reduce costs of docker cluster by 50 to 75%.

LexisNexis - DevOps AWS SME re:Invent and lead team's efforts in the cloud. Developing automation using Ansible and CloudFormation for AWS environments. Developed Python scripts that used AWS API to take snapshots and perform snapshot lifecycle management. Set up consistent replicable environments using best practices for cloud and security. Internal AWS clouds evangelist.

EnInIn.com - Used Rackspace cloud to provide backend services for <http://getfoodtruckie.com>

Railinc - Used AWS for proof of concept collaborations with vendors in a secure environment.

DEVOPS

iFIT - Created multiple pools of self-hosted GitHub Runners in AWS for x86 & ARM based development. Proposed AMI CI/CD pipeline plan.

Cengage - Setup Dynatrace monitoring and dashboards for customer facing applications. Performed Jenkins migrations for consolidation of Jenkins servers, and further automated sets of automated test jobs. Used ansible to manage configurations of Mac Minis and as part of pipeline to provide CI/CD for AMIs. Coded build pipeline code in groovy, python, and shell. Set up and managed Mac Minis in data center as Jenkins build servers for mobile team.

LexisNexis - Developed automation to wrap around problematic tool managing access to Linux servers through active directory, reduced by half tickets to DevOps team. Developed automation to shut off Splunk in QA environments with runaway logging, which eliminated licensing violations. Administrated clustered Splunk installation indexing 350GB+/day from 2000+ cloud servers. Completed several Splunk training courses for 6.x: Using Splunk, Searching and Reporting, Splunk Enterprise System Administration, Trouble Shooting Splunk Enterprise, Splunk Cluster Administration, Splunk Fundamentals

Railinc - Solved problems faster than commercial support and notified them of the fixes. Automated a mitigation solution for connection leaks, and later resolving the problem in the networking layer.

GSK - Consulted with other teams to troubleshoot advanced bugs and system performance problems. Automated configuration of intranet java hosting environment on apache/tomcat, Jboss, Sun One iPlanet.

LEADERSHIP

Cengage - Spent one year leading work on shared Jenkins environment. Led off shore team on tasks to automate support of Jenkins environment.

LexisNexis - Represented the company at the Continuous Delivery Summit with leaders from Netflix, Google, Facebook, Twitter, Slack, IBM, Cisco, SAS; a "behind closed doors" discussion of emerging best practices for continuous delivery at scale. Encouraged cloud use across teams in business unit.

MRM - Hired the IT team from scratch. Inspired the executive team to become an e-commerce provider.

ENTREPRENEURIAL THINKING

EnInIn - Developing concept, architecture for TacoLoco/FoodTruckie food truck tracking mobile apps. Generating buzz on social media, seen here <https://foodtruckie.eninin.com/> .

MRM - Architected, and led development of inventory/warehouse management system with a REST like API to work with web store systems such as Yahoo Shopping, allowing the company to diversify from literature fulfillment to e-commerce.

WEB APPLICATIONS

Bank of America - 100% remote position - Porting SAN management system from propriety Perl on Solaris to open source Perl on Linux. System managed storage allocations enterprise wide, allocated around 170 TB of storage per month and saved the company over \$10,000,000 per year in storage costs. Used Java, Perl, PHP, and Javascript.

EnInIn, MRM - Rapidly prototyped proof of concept web applications in PHP.

NCSU - Developed online training teaching parallel programming using Perl-CGI.

UNIX DEVELOPER

Avant! - Focused on algorithm design and optimization; designed algorithm to find electrical shorts in integrated circuit designs, that ran in minutes test cases that the prior method failed to complete in days. Enhanced algorithm for more accurate design rule check that is 142 times faster than the previous approach. Developed specification for small file caching to improve system performance in benchmarks against competitors. Researched file system performance of versions of Unix and Linux. Developed large file I/O optimization for Solaris that results in a 10% improvement in application run times.

MRM, GSK - Modified open source software written in C or C++ for special use cases.

TECHNOLOGIES

Cloud: AWS, Cloud Formation, Ansible, RackSpace; Automation: Puppet, Ansible, scripts, CDK

Languages: Python, shell/bash, Ruby, perl, Java, Javascript, Groovy, PHP, Objective-C, C/C++, JS/TS

Amazon AWS: EC2, VPC, Lambda, Auto-scaling, Auto-recovery, EBS, S3, Glacier, ELB, Route 53, Elasticache, RDS, CloudFormation, CloudWatch, SES, CloudTrail, SNS, AML, Terraform

Other: iOS, svn, git, Xcode, SQL, multi-threading, MySQL, Oracle, XML, SSL, JSON, NetApp, F5, html, WebSphere, Apache, Nginx, Tomcat, JBoss, gcc/gdb, TCP/IP, DNS, Docker, Jenkins, Zabbix, Dynatrace, Datadog

EDUCATION

Master of Science in Computer Science, minor in Industrial Engineering

Bachelor of Science Degree in Computer Science

North Carolina State University, Raleigh, NC

EMPLOYMENT HISTORY

March 2022 - November 2022: iFIT - Logan, Utah

Senior DevOps Engineer working on IaC, logging & monitoring, SRE like work, AWS Cloud and CI/CD.

May 2018 - March 2022: Cengage - Raleigh, NC

DevOps Systems Automation Engineer focusing on systems automation, Amazon AWS cloud, and CI/CD.

July 2014 - May 2018: LexisNexis - Raleigh, NC

DevOps Systems Automation Engineer focusing on systems automation and Amazon AWS cloud.

January 2014 - July 2014: First Citizens Bank - Raleigh, NC

Contract Automation Systems Engineer providing systems support for 300+ Linux servers and VMs.

March 2012 - September 2013: Bank of America - 100% remote work from home position

Contract developer providing new feature and maintenance for suite of storage automation tools.

March 2010 - March 2012: Railinc - Cary, NC

Contract System Administrator leading two person team managing F5's, SSO, portal, content management, and reverse proxies.

April 2009 - March 2014: EnInIn - Morrisville, NC

Founder and primary developer building iPhone apps and offering consulting services.

August 2002 - May 2009: GlaxoSmithKline (GSK) - Research Triangle Park, NC

Senior Internet Technologies Consultant defining corporate standards for Java app stack.

November 1998 - August 2002: MRM, Inc. - Research Triangle Park, NC

Manager of IT leading team developing/supporting warehouse and e-commerce order management.

June 1996 - November 1998: Avant! Inc. (pronounced Avanti) - Research Triangle Park, NC

Software Engineer focused on algorithm optimization responsible for several speed improvements.