Brian Brock

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Software Engineer with technical writing and quality engineering experience.

EXPERIENCE

University of North Carolina , Chapel Hill, NC — *Archival UNIX Application Analyst*

November 2022 - present

Design, construct, and maintain aspects of data management solutions and the underlying software.
- Rocky Linux
- Postgres
- Harvard Dataverse
- Python

Rapid Silicon (via ASICSoft), Los Gatos, CA — *Technical Writer*

June 2022 - July 2022

Technical writer for documentation explaining new System on a Chip (SoC) architecture using FPGA and RISC-V. Analyze developing product and engineering notes in github, work with marketing team and engineers to standardize terminology.
- DITA / FrameMaker
- Field-programmable Gate Array (FPGA)
- Chip development process

LexisNexis, Raleigh, NC — *Technical Writing Consultant III*

July 2020 - August 2021

Technical writer for InterAction CRM and Juris billing software. Planning, creation, and delivery for several manuals

Skills:
- HTML / XHTML / CSS
- Git
- Flare
- XML
- MadCap Flare
- Snagit

Documents:
- Client insights manager Answer Center
- Client insights manager Release Notes
- InterAction core
- InterAction Answer Center
- Admin Guide
- User Guide
- IQ Installation & Configuration Guide
- Version Compatibility Matrix

Processes:

LANGUAGES

- Python
- HTML / XML
- CSS
- SQL
- JavaScript

TOOLS

- Linux administration
- Git
- Ssh
- Apache
- Jira
- Jenkins
- Trello
- Agile
- Continuous Integration / Continuous Delivery
- MadCap Flare
- Harvard Dataverse

- Daily scrum standups and Agile ceremonies
- Screenshots
- Legal review
- Trained peers on git
- Research on content for monthly releases and 3-week sprints
- Assist onboarding new writer
- Assist team transition
- Work with Project Managers
- Assisted Training / education staff
- Push monthly documentation updates to production
- Manage documentation updates in Azure boards

LexisNexis (via SGA), Raleigh, NC — *Technical Writer*

September 2019 - July 2020

InterAction and Juris documentation. Planning, creation, and delivery for User Guides, Administration Guides, and Release Notes. Participation in scrums, review, planning, and grooming sessions with several teams.

Optanix, Raleigh, NC — *Technical Writer*

May 2018 - June 2019

Documented the Optanix Platform (OP), Service Infrastructure Management Layer (SIML), and related technologies for internal and external customers. Provided engineering expertise to the writing team.

- **OPL Guide** - Wrote the Optanix Procedural Language (OPL) Software Development Kit (SDK) Guide, the language specification for a domain-specific language (DSL) in active development, with biweekly updates.
- **User Guide, Administrator Guide** - Co-written for Optanix Platform 5.6 and 5.7. Embedded in the company's flagship product, and bound and printed for clients.
- **Release Notes** - Co-written for Optanix Platform 5.6.
- **Installation and Configuration Guide** - Optanix Platform 5.6.
- **Training** - materials for internal training of operational support staff.
- **API Specification** - descriptive specification for Optanix Platform 5.6 and 5.7 APIs..
- **Post-patch Notes** - Optanix Platform 5.6 and 5.7.
- Worked with several development scrum teams simultaneously.
- Assisted other writers with understanding technical and engineering aspects of the company's product line.
- **SIML documentation** - Cowrote documentation for Systems Integration Management Layer (SIML), a layered product providing clustering and HA management.
- Assisted development teams with the Platform, including Business Impact, Execution Framework, Event-handling systems, Reporting, and Performance Metrics.

Skills:
- API development and documentation
- Agile tools, including Jira and Jenkins
- Scrum
- Go

bbrock.org, Raleigh, NC

August 2017 - current

Creator and maintainer of bbrock.org, a blog and website for concepts related to Software Engineering, Quality Engineering and Technical Writing.

- PHP
- Python
- WordPress
- PostgreSQL / MySQL
- HTML and CSS
- Hosting and system administration

Red Hat, Raleigh, NC — *Senior Technical Writer*

December 2016 - July 2017

Writer in the Developer Tools group. Documented the Container Development Kit (CDK), a Red Hat product that supports development of OpenShift pods on a desktop.

- Wrote the **Getting Started Guide, Installation Guide, Release Notes and Known Issues, and a blog article** for installation of the Container Development Kit (CDK) product on Fedora.
- **CDK 3.0** documentation – https://access.redhat.com/documentation/en-us/red_hat_container_development_kit/3.0/
- **CDK 2.4** documentation – https://access.redhat.com/documentation/en-us/red_hat_container_development_kit/2.4/
- **Blog** article on CDK usage – https://developers.redhat.com/blog/2017/06/20/running-cdk-3-0-on-fedora-25/
- **Integrated content** from the upstream Minishift team git repository into git repository for documentation of Red Hat products.
- Assisted with **technical accuracy** for writers of related products for the Developer Tools group.
- Scripted the installation of CDK 2.4 and engineering tasks.
- **Synchronized documentation schedule** with CDK development sprints.

Skills:
- OpenShift
- Minishift
- Kubernetes
- Docker
- Vagrant
- Markdown
- Container Development Kit (CDK)

Red Hat, Raleigh, NC — *Quality Engineer*

January 2001 - November 2016

Quality assurance testing, planning, and tool creation for defects, regressions, releases, and updates to Red Hat Linux, Fedora, and Red Hat Enterprise Linux (RHEL).

Red Hat Bugzilla – https://tinyurl.com/bbrock-redhat

Several teams stand out:

- **Hardware Certification** - the tool that certifies hardware as working with RHEL, also seen as catalog.redhat.com.
- **Emerging Technologies** - Quality Engineer for a research group that developed earlier virtualization at Red Hat, including the Xen kernel and libvirt.
- **Errata Task Force** - A group of quality engineers that established the workflow for updates to Red Hat Products and developed related tools.
- **Kernel-QE liaison** - coordinated quality engineering for the Linux kernel.
- **Base OS QE** - testing the Red Hat Linux installer (anaconda), the LAMP stack (Linux, Apache, MySQL, Perl), as well as the Postgres database, the Tux web server in the Linux kernel, kernel utilities, and encryption services.

Process:
- Test automation
- Candidate interviews
- Emerging technologies
- Errata Task Force

Responsibilities:
- Kernel
- glibc
- Xen and libvirt
- Conga and clustered storage
- OpenSSH and OpenSSL
- Apache
- Postgresql
- Perl
- Hardware certification (RHTS / rhcert)

Skills:
- Python
- Selenium
- Bash
- Perl
- C
- XML / HTML / CSS
- Cerberus and Bonnie
- Agile
- Continuous Integration / Continuous Deployment
- Trello
- Jenkins
- Bugzilla

Red Hat, Durham, NC — *Technical Engineer, Developer Support team lead*

November 1999 - January 2001

Team lead for new Developer Support group. Spearheaded contract support for Fortune 500 companies creating applications and systems based around Red Hat Linux. The team lead role included:
- **Technical Account Manager** for several contracts, including Cisco Embedded Systems Unit.
- **Team leadership** duties to organize and coordinate contract support.
- **Hiring** - organization and interviewing of candidates for Developer Support and team lead positions, after joining Red Hat's QA organization.
- **Pre-sales tech support** and technical lead for potential customers with unique projects.
- Telephone and email-based **installation support**.

Skills:
- C – development, contract work
- System administration scripts in bash
- RPM
- System tools and servers – http, bind, mail, hardware support

Computer Sciences Corporation, NASA Langley Research Center, Hampton, VA — *System Administrator*

July 1999 - October 1999

System Administrator for diverse groups of engineers and graduate students on-site at a federal government aerospace facility.
- **Red Hat Linux** - desktop administration.
- **Solaris** - team servers administration.
- **Maintained and built open source packages** - for deployment on Solaris systems.
- **User support** - with remedy ticketing system.
- **Y2K** compliance.

Skills:
- Package creation using RPM build tools, some ported to new architectures
- Bash
- Bind
- SSH

EDUCATION

James Madison University, Harrisonburg, VA — *B.S. in Computer Science*

August 1993 - December 1997

Wake Technical Community College, Wake County, NC — *continuing education*

January 2016 - August 2016

Continuing education skills development. Newer programming languages and techniques. Development of mobile applications.

SKILLS

Selenium test automation of web content using Python and bash.

Test development using Python, bash, perl, and C.

Interpreting and debugging source code in Python, C, Golang, bash, perl, C++, and Makefile.

Flexible and adaptable in helping a company with less than 100 employees achieve profitability and grow to over 10,000.

Agile Development practices in quality engineering and documentation workflows. Usage and development tools including Git, Jenkins, Jira, and Pantheon (document publication).

Creating test plans and documentation plans for products in development.

Red Hat Enterprise Linux, Fedora Linux, and previous versions of Red Hat Linux.

Virtualization technologies including Xen, KVM / libvirt, Docker, and Container Development Kit (CDK, miniShift).

Red Hat Hardware Certification Test Suite. Usage based on Quality Engineering testing and development of the test suite.

Linux server configuration with extensive experience. Network services including dns and nfs, usage of security tools, system administration tasks.

Internet of Things (IoT) creation with Arduino and Raspberry Pi.

Programming in Python, Perl, C, Java, Bourne-again shell and related tools.

Technical writing for software development efforts and requirements analysis from field studies.