

Jeff Trawick

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Career Summary

Accomplished member and leader of teams developing, testing, and supporting network software, web infrastructure, and applications for companies big and small, in planned development activities as well as urgent problem resolution. With colleagues in the next cube, in other areas of the business, or on the other side of the world. Motivated, detail-oriented, self-starter, eager learner. Respectful and empathetic of customers. Long time open source developer. Independent consultant and contractor since 2012.

Skills

Python	C	JavaScript	Java	Ruby	Perl
BSD Sockets	Linux/Unix systems programming	CSS	HTML	SQL	Django
Django REST framework (DRF)	Tastypie	jQuery	HTTP	Git	GitHub
Defect/task tracking tools	Debugging	Linux system admin	Unix shell scripting	Ansible	Docker
Postgres	HTTP Servers	Open Source development	Cloud services	Virtualization	Automated testing
Documentation	Customer communication	TCP/IP	<i>more</i>		

Open Source Experience

Most of my open source contributions have been through the Apache Software Foundation.

- Apache HTTP Server committer, Project Management Committee (PMC) member since 2000
- Apache Portable Run-time committer, PMC member since 2000, Chairman of PMC 2010-2016
- Apache Software Foundation member since 2000

In addition to the large contributions to these ASF projects, I've also made minor contributions to other projects as I've encountered issues in my work. A few examples: Platform-specific fixes in PHP and `lsOf`; API documentation fix in OpenSSL; Python 3 fixes in several Django extensions. (Open Hub has more information at <https://www.openhub.net/accounts/trawick>.)

Emptyhammock History

My solo company is Emptyhammock Software and Services LLC, formed in 2012 when I left Oracle. Through Emptyhammock I have helped other companies in different areas, from providing configuration assistance, defect resolution, and functional enhancements for Apache HTTP Server and extension modules, to developing and supporting web applications. The Apache HTTP Server work included making improvements to the SSL implementation on behalf of Google and Mozilla Foundation. Much of my work since 2014 has involved development of web applications using the Django framework for Python.

Lengthy Contracting Engagements

2018 – present

**Rare Cancer Research Foundation
703 Foster St.
Durham, NC**

I took over maintenance and development of a Django application in 2018 and have continued in that role while providing support for staff via Slack. Notable work has included implementing a new deployment for the Django application, upgrades through several versions of Django and Python, reimplementing document generation and signing, and working with another developer to reimplement the front-end application and improve backend APIs. Most recently I have implemented a Django admin interface and API with Quill (rich text editor) and DRF for content displayed by the front-end.

2014 – 2017, 2020 – 2023

**Caktus Group
108 Morris St, Suite 2
Durham, NC**

I have worked on many projects for Caktus customers over the years. Weekly hours have ranged from a handful to full-time. Some projects were coordinated by Caktus; others were coordinated by the customer (“team augmentation”). Django versions ranged from 1.5 to 4.1. Several projects used Django CMS and several others used Wagtail. I worked with one particular customer for most of my two tenures at Caktus, but worked on other projects for much shorter periods of time.

Employment History

2018 – 2020

**American Efficient
703 Foster Street, Durham, NC
Working remotely**

Primary responsibilities were updating and creating web applications to support internal business workflows. This included creating Docker-based deployments for AWS ECS (Fargate) using other AWS features such as ElastiCache for Redis, RDS for PostgreSQL, Application Load Balancer, etc. Database

schema were developed and maintained in SQL, and application code used SQLAlchemy to manipulate the data.

January 2010 – 2012, beginning with the Oracle acquisition of Sun and product realignment

**Oracle Corporation
4150 Network Circle, Santa Clara, CA
Working remotely
Oracle HTTP Server**

Consulting Member of Technical Staff, architect for Oracle HTTP Server (OHS). Primary team responsibilities were developing and supporting OHS and the WebLogic plug-ins for several web servers. My roles included providing technical guidance for all phases of the product lifecycle, serving as an interface between the India team and product management in California, serving as security focal point for the product, and working with customers on high severity issues.

July 2008 – January 2010

**Sun Microsystems
4150 Network Circle, Santa Clara, CA
Working remotely
Sun Web Stack**

Senior Staff Engineer, Engineering Lead for an open source-based, multi-platform web stack product at Sun. This position involved providing architectural guidance for the Apache httpd portion of the product, documenting and socializing product designs, representing the product in discussions with other groups at Sun, some development and testing, and various administrative tasks. The product included many common open source server components — web servers, databases, caches, and scripting languages.

March 2000 – July 2008

**IBM, 4205 S. Miami Blvd., Durham, NC
WebSphere Application Server
IBM HTTP Server team**

Senior Software Engineer. Developer and L3 support for IBM HTTP Server, IBM's web server based on the open source Apache web server. IBM HTTP Server architect and team leader of development and L3 support from 2005-2008. Responsibilities included planning, prioritizing, tracking, and reviewing team activities; documenting and presenting designs; creating internal and external documentation; developing and fixing proprietary and open source code; automating build and test tasks; working with customers to diagnose problems in complex deployments. Technologies included HTTP, SSL, TCP/IP, socket API, CVS, Subversion, Perl, Ruby, Bourne shell, make and other Unix build tools, C, Java, JUnit, Eclipse, Linux, AIX, Solaris, z/OS, HP-UX, and Windows.

Major initiatives

- Created package of collector tools, diagnostic plugins, and documentation used by customers and IBM support personnel to diagnose problems in IBM HTTP Server. <http://www-1.ibm.com/support/docview.wss?uid=swg24008409>
- Created Java/JUnit-based FVT and UT regression suite for IBM HTTP Server.
- Created extensive set of documents to aid L2 support; organized these into L2 support roadmap.
- Automated many development, build, and test tasks.

- Modeled team workload across different responsibilities, established use of open source issue tracking system (Eventum) for consolidating work items, developed Ruby scripts to query Eventum database to show workload problems as well as other reports of activities by project, individual, etc.

January 1990 -- March 2000

**IBM, 4205 S. Miami Blvd., Durham, NC
Communications Server/390**

Advisory Software Engineer; developer, development team leader, and FVT tester for new features in many different areas of the product, including syslogd and telnetd for Unix System Services, AnyNet TCP/IP over SNA, an experimental port of the AIX TCP/IP implementation to z/OS, and CMIP protocol support for management of SNA networks. Responsibilities included planning and tracking team activities; working with architects to evaluate customer requirements; documenting designs; code and unit test of new features; functional test, including testcase design and automation; working with service team on customer problems. Technologies included socket API, TCP/IP, CMIP, Perl, make, C/C++, z/OS Unix System Services and traditional MVS, Linux, AIX, Rexx, VM/CMS.

Major initiatives

- Promoted code reuse and consistency with existing Unix interfaces in development of new features.
- Wrote extensive regression tests for CMIP protocol support, TCP/IP socket API, and syslogd.
- Created popular tools for developers and testers, including an interactive and scriptable interface to Unix system calls, for examining system behaviors and performing product testing.
- Interacted directly with z/OS customers on Unix System Services mailing list, providing support and understanding problems and requirements. As a result, resolved some product limitations and published several as-is applications.
- Improved port of CVS to z/OS.

Prior to January 1990

**University of Alabama
Tuscaloosa, Alabama**

Taught BASIC, COBOL, and Pascal classes as a graduate student. Developed or enhanced university software systems for freshman orientation, building maintenance, and psychological testing.

Education

University of Alabama, Tuscaloosa, Alabama

M.S. in Computer Science, 1989

B.S., 1987, major in applied mathematics, minors in Computer Based Honors Program and English

Since the advent of MOOCs, I have completed many on-line courses in computer science as well as timely software development technologies.