

Jason F. McBrayer

Degrees

B.A. 1995 (anthropology with minor in computer science), Wake Forest University.

Other education

Graduate work in Anthropology at Tulane University, 1995–2003.

Experience

Senior Applications Analyst, SC DHEC, 2014–present

- Developed web-based solutions for customers in the environmental bureaus of DHEC, principally using ASP.NET MVC, C#, and .NET 4.5.
- Maintained legacy environmental applications, including ASP.NET WebForms applications and web services.
- Served as technical lead for environmental applications, making technical decisions and acting as mentor to a team of in-house staff and contractors.
- Handled production deployments for environmental applications developers.
- Communicated with customers and project managers on all stages of projects from initial planning through production deployment and maintenance.

Senior Software Engineer, SC Department of Natural Resources, 2011–2014

- Supervised team of four developers (FTE and contractors) on both shared and individual projects dealing with a wide range of agency concerns, from financial to scientific.
- Continued to serve as lead developer and architect for team of programmers.
- Developed libraries for use by other programmers.
- Reviewed developers' code and tests.
- Set branching and release management policies for all projects; coordinated releases.

Applications Analyst II (permanent), SC Department of Natural Resources, 2010–2011

- Worked as lead developer with DBAs, developers, and internal customers to design replacements for legacy mainframe financial and reporting tools.
- Led transition of web development from PL/SQL to ASP.NET MVC with NHibernate.
- Instituted source control system use and release procedures.

Senior Applications Analyst (temporary grant), SC Department of Natural Resources, 2006–2010

- Cataloged data collected since 1970s by Freshwater Fisheries section of SC DNR to determine data storage needs. Produced catalog of data sets with metadata.
- Designed and implemented schema for storage of present and historical FWF data sets in the Oracle RDBMS.
- Designed and implemented web-based data management applications for FWF data, using Java J2EE, Spring MVC framework, Oracle TopLink ORM, JSPs, and AJAX techniques on Oracle Application Server.
- Extensively documented all of the above.

Freelance and Volunteer, 2004–2006

- Carolina Peace Resource Center: migrated nonprofit office from Windows to Fedora Core Linux, including migrating Access databases to intranet Linux/Apache/MySQL/Python (LAMP) solution.
- Open Source software development: “fancy beeper” Linux kernel module; “stockphoto” web-based photogallery
- Maintained small public repository of extra packages for Fedora Linux.

System Administrator, Xeran Technologies 1999–2004

- Managed web, mail, and database servers for mid-sized web-hosting company (~3000 domains hosted) on Redhat Linux.
- Designed name-based virtual hosting environment compatible with existing IP-based system; implemented web-based control panel for hosting automation. Co-designed clients database and automation of common administrative tasks.
- Handled level-two customer support.
- Automated migration of customers from home-grown hosting environment to third-party hosting management software.

Areas of Expertise

Programming

- Effective programming in Python, C# (.NET), Java, JavaScript, C, Perl, Lisp, and shell scripting.
- Web application programming in Perl and Python (including the Django and Flask web frameworks), in C# (including ASP.NET MVC with the NHibernate ORM and ASP.NET with LINQ to SQL) and in Java with standard J2EE components, servlets, JSPs, and the Spring MVC framework, with Oracle TopLink and Hibernate ORMs.
- Standards-compliant and accessible (HTML5 and CSS3) web design.
- Web front-end development with JavaScript (including JQuery), with a strong focus on usability, accessibility, and progressive enhancement.
- Database usage in SQL (Oracle, SQL Server, MySQL, PostgreSQL, SQLite), and integration of SQL with scripting/VHL languages.
- Familiarity with revision control software including CVS, SVN, Mercurial, and git, as well as experience with best practices for branching, merging, and release management.
- Experience with data migration using XML with scripting languages.

Unix System Administration

- Experience on Redhat Linux (including Fedora), Debian GNU/Linux (including Ubuntu), Apple A/UX, and IBM AIX.
- Deployment and integration of network services including HTTP(S), DNS, SMTP, POP, IMAP.
- MySQL and PostgreSQL database administration and programming.
- Linux network security, including firewalls, secure web programming, and intrusion detection and cleanup.

References available upon request.