Eric Dobbs

eric@dobbse.net
Boulder, Colorado

Summary of Strengths

- Sixteen years full-stack web development, thirteen years test-driven
- Personal and professional integrity
- Exceptional written, verbal, and visual communication skills
- Enthusiasm for learning and teaching
- Adaptability to change
- Amiable personality
- History of exceeding expectations
- Extremely versatile: object-oriented or functional, polyglot, UX and middleware and db

Senior Software Engineer
Mobilecause
February 2012 to present

Impact	Fostered a culture of continuous improvement through honest and courageous communication, by speaking hard truths, and applauding when others did the same.
Emergent Design	Refactored all outbound messaging, the core purpose of the software, into a delivery service without disrupting any existing message flows. Thanks to this layer of abstraction, only two weeks later we were able to easily improve throughput just in time for a customer's big campaign messaging over 330,000 numbers.
	Introduced a command dispatcher and handlers for message processing.
	Created a foundation for modularized html, css, and javascript which enabled migration of the existing UI from a home-grown CSS-soup to Bootstrap.
	Refactored one particularly messy controller with just a handful of method extractions. A few weeks later those changes enabled a colleague to clarify the routing and models and complete the cleanup without me.
Scale	Profiled outbound messaging performance and throughput. Identified garbage collection and IO as primary bottlenecks.
	Threaded message delivery for an immediate twelvefold increase in SMS message throughput. Introduced retries and fallbacks to ensure message logging and persistence and expand the ability to identify and diagnose failures.
	Enabled message workers to run under JRuby as a strategic move to open other performance opportunities via JVM based tools and languages.
Front-end Engineering	Streamlined unit testing of javascript front end code using Jasmine.
	Created dynamic and thoroughly customizable fundraising thermometer and pledge wall for use in high-profile gala events. Produced the SVG graphic for dynamic display and employed Ember.js for updates.
Methodology	Full-stack agile methodologies including continuous integration, full-time pair-programming, retrospectives, etc.

Aikido Instructor
University of Colorado Recreation Center
August 2005 to Present

Impact	Three students gave unsolicited feedback that my teaching changed their lives.
	Increased typical class enrollment by 50%. Inspired many students to join Boulder Aikikai.

Independent Contractor
Presilient
November 2011 to January 2012

Integrating Legacy System	Client had a significant investment in an existing J2EE application running in JBoss 4 with a complex authentication scheme and heavy reliance on MSSQL stored procedures.
	Created a thin RESTful JSON API to wrap the existing stored procedures. By running the Rails 3 app under JRuby, saved the client from a complete re-write of their authentication system and enabled the use of battle-tested JDBC drivers for MSSQL.
Front-end engineering	Created a light front-end framework against the JSON API for their service request portal using Bootstrap and Backbone.js. Test-drove all front-end code using Jasmine.

Software Engineer
Pivotal Labs
November 2010 to September 2011

Impact	Initiated an informal usability analysis for Groupon's editorial tools via direct observation of editors and deal creators.
	Consequently created dramatic improvements in deal creation and editorial workflows. Streamlined communications between sales and editorial teams by integrating with Salesforce.
Learning	Mastered Ruby within a month. Immediately effective maintaining and updating existing Rails application for Groupon Merchant Center team.
Scale	Refactored Groupon's merchant analytics into an independent service-oriented architecture. Improved largest deal analytics reports from a query time of 7 minutes down to 15 seconds.
Methodology	Full-time pair-programming, behavior-driven design (BDD), continuous integration, collective ownership, small releases, planning game, retrospectives, on-site customer.

Consultant
bivio Software, Inc.
December 2003 to May 2010

Impact	Changed the company culture: Testing became a core value. Extended internal unit testing framework to simplify testing core business logic. Number

of test files grew from 85 to 585 or 20% to 60% coverage.

Drove successful adoption of XHTML and CSS for web interfaces, and wikis and blogs for content management, both internally and for bivio's customers.

Learning   In order to build a python interface to a C++ scientific visualization toolkit, learned on demand the toolkit's API, C++, Qt, PyQt, OpenGL, PyOpenGL, NumPy, python distuitls, SIP, and GNU autotools.

Kept pace with bOP, an extremely complex and abstract web framework under continual evolution: The framework grew from 390 classes to 900+ through 720 releases with a median days-between-release of 1.

Teaching   Trained programmers with wildly diverse levels of experience from high-school student interns with no previous programming experience to veteran C++ and Java developers with decades of experience.

Trained customer support staff in investment club accounting software, managing customer expectations, and in the use of CRM systems. Most of the training was by teleconference or online via WebEx or GoToMeeting.

Lead a three-day bOP training course for a client's entire development team whose programming skills ranged from systems administrators to senior embedded systems programmers. Also created the overall training plan and most of the supporting documentation. Received strong positive feedback from all participants.

Client Impact   Saved face for the company when the president forgot a meeting with the biggest client. Took his place offering valuable contributions around complex design and security issues. Client was seriously impressed with my ability to step in unprepared and to turn a potential train wreck into a productive meeting.

Complexity   Maintained and extended applications in diverse and complex domains including a state-wide insurance accounting system, a non-profit grant application system, a formal balloting system for industry standards, an alumni association membership system, and an investment club tax accounting system.

Independent Contractor
Microcomputer Training Specialists
March 2003 to December 2003

Impact   Coached the developers of the City and County of Denver's Wastewater Management Division building an internal J2EE web application. Previous failures to replace or repair the legacy system made the project particularly high-risk. Delivered a replacement system to production in nine months.

Methodology   Demonstrated agile development values (communication, simplicity, feedback, and courage) and practices (small releases, simple design, test-driven code, refactoring, collective ownership, coding standards).

Developed automated acceptance tests in close communication with the users. 75% of internal code was written test-first.

Senior Software Engineer

PlanetCAD Inc.
July 2000 to September 2002

Impact   Delivered three major releases precisely on schedule. Customers were very impressed by the features added in each release.

                  Designed extensible workflow engine to manage automated processing of complex transformations of engineering data.

Leadership   Promoted to Lead Developer after only four months. Acting Development Manager for eight months. Cultivated a very cohesive development team despite strikingly different personalities and significant turnover among executives and management.

                  Worked with company officers to influence PlanetCAD's technical direction. Conducted formal and informal presentations and meetings. Gave detailed benefit and risk analyses of three Java web application frameworks.

                  Led design meetings. Negotiated product requirements and development schedule. Summarized key differences of opinion. Resolved disagreements. Built consensus. Balanced maintenance of existing features with new development under tight deadlines.

Learning   Learned PHP, Java and Python on demand. Ported an online CAD translation service from PHP to Java.

                  Proactively extended Java and OOD skills. Independently studied design patterns, refactoring, unit testing, development processes, open source projects, UML, Java security, JMS, and object-relational modeling.

Methodology   Championed the adoption of Agile development practices including XP's Planning Game for scope-centered scheduling, automated unit testing, acceptance testing, refactoring, short release cycles, and collective ownership.

                  Applied design patterns including Composite, Facade, Factory, Flyweight, Model-View-Controller, Singleton, and State.

Coaching   Introduced colleagues to the use of version control in web development, UML, use-case based analysis, JSP tag libraries, and design patterns.

PathFinder Architect
VisionLink, Inc.
July 1997 to March 2000

Impact   Developed and managed VisionLink's flagship product and all client support. Carried PathFinder into the de facto standard in school-to-career data systems.

Development   Released five versions of PathFinder; each version involved a six month cycle and included all phases of development from feature request to release and ongoing support.

                  Engineered and implemented the transition from remotely managed installations to a software as a service (SaaS) model which thrived through the .COM crash and beyond.

Communication Mediated interactions between clients and their ISPs. Facilitated discussions to

solicit new features from clients. Led seminars on network security. Delivered presentations to audiences of up to 90 people. Provided technical support by phone.

InterAct Manager
Clark County Public Education Foundation
August 1994 to July 1997

Impact	Transformed InterAct from a pilot project BBS with seven desktop modems into a production ISP for the school district with seven T1 lines.
Leadership	Supervised an office of two full-time technicians and three student interns. Mentored staff in their professional development. Delegated responsibility with authority, conducted interviews, addressed disciplinary issues as necessary, and accepted direction from and reported progress to supervisors.
	Competed with the District Information Systems Division in the deployment of wide area network sites; with only two field technicians we matched the number of remote sites and surpassed the support for those schools we connected.
Network design	Collaborated in the design of a wide-area network encompassing the entire Las Vegas valley and beyond. As of July 2000, that design was still in use connecting 250 sites across 7,910 square miles, including 234 schools, supporting 217,000 students, and more than 15,000 educators.
Customer support	Supported a complex mix of customers including teachers, students, principals, parents, administrators, school board members, existing and potential donors to the foundation, and the superintendent.

Research Assistant
University of Toronto, University of Siena
August 1990 to May 1991 and January 1992 to June 1992

Illustration and animation	Created unique visual aids for education and research. Illustrated fundamental concepts and created original animated analyses of pivotal diagrams of Renaissance perspective by Alberti, Leonardo da Vinci, Piero della Francesca and others.

Forth Degree Black Belt
Boulder Aikikai, Aikido Schools of Ueshiba
May 2013

Bachelor's of Environmental Design, emphasizing computer methods in design
College of Architecture and Planning, University of Colorado at Boulder
May 1994

Technical Skills
(aka. buzzword compliance ;-)

Languages	Ruby JavaScript Perl Python SQL Java AutoLISP AppleScript PHP bash DOS batch files a little C++ a little Common Lisp

Markup	HTML5	XHTML	HTML	DHTML	XML	CSS

Web frameworks	Rails bOP Struts Turbine a little Django CGI (the simplest framework that can possibly work ;-)

Databases	PostgreSQL	Oracle	MySQL	Access	FileMaker Pro

Practices	Test-driven development (TDD) Behavior-driven development (BDD) Pair programming Don't repeat yourself Emergent design Design patterns Stories Planning game Continuous integration Small releases Refactoring Collective ownership Coding standards

Operating Systems	MacOS X Linux Windows XP, 2000, NT, 98, 95, 3.x MacOS 6-9
Networking	TCP/IP routing, addressing, subnetting NAT DNS firewalls proxy servers routers ethernet hubs and switches modem banks file and print servers network printers cabling

Graphic design	image scanning digital photography image processing illustration page layout 3D modeling rendering animation