

I am an innovative self-starter with 19 years of experience in Java, systems architecture, product design, integrations, security, application scaling, component design, and user-experience design, seeking full-time or consulting work designing, coding, leading, or mentoring on a project.

I have extensive experience building enterprise Java and full-stack systems in corporate and university environments, as well as start-ups and non-profits. I am versed in open source software, both as a user and contributor, and I created the open source project **dynamide.com**, which is a dynamic application framework, component library, and web-based development environment for building modern apps for the web and mobile.

I design highly useable web interfaces, optimize and stabilize high-load systems, set up test frameworks, and tune tools for build automation. I create tools, components and infrastructure for development teams, and provide training and mentoring for team members. I am adept at gathering user requirements and rapidly proposing and implementing architectures which synthesize open source and custom frameworks.

Success Stories ::

I solve “impossible” problems using tenacity, interdisciplinary skills, polyglot language ability, team collaboration and brainstorming. Some of my happiest successes include:

Flurry.com had a debilitating Jenkins build system that took just under two hours to run on the cluster. I gathered requirements and pitfalls from stakeholders, administrators, and developers who had made previous efforts. I parallelized the tasks, and optimized the Jenkins build down to 12 minutes on the cluster, or 6 minutes on a developer workstation.

U.C. Berkeley's CollectionSpace service layer object hierarchy had 25 classes of 400 lines each, mostly copied and then subtly modified code, which had become a hindrance to development and required that only Senior Java developers be allowed to make even the smallest change. I refactored these classes to about 6 lines each, eliminating 98% of the “core code,” and installing patterns which all developers could safely maintain and extend.

U.C. Berkeley's CollectionSpace testing system involved extensive copy-and-paste code that had grown to over half of the total code base. It was a complex, largely hand-written JAXB Java client, which was not used by any other external clients except for import. To replace this, I built a simple framework, **XMLReplay**. It read simple configuration files anyone could edit easily. It tested every service, and reported unexpected differences. It speeded mainline development for the entire team, because writing a single line in XMLReplay meant that developers were done writing test code. And the import team was able to use XMLReplay to script all imports.

Thomson Financial needed a way to connect their **Vestek** clients through the web to their big mainframe which hosted 300 financial apps. These apps required ten FORTRAN programmer/mathematicians for maintenance and extension, and the plan was to have me teach the ten programmers how to program in Java, so they could port their user interface code by hand. In talking with them and reviewing their code, I realized that most of the hard work of each app was already done, in data-format files they already maintained. I wrote **iAnalyzer** to read these files and automatically create the entire web user interface dynamically, using a wizard page flow. This greatly simplified the user's experience and standardized all the apps. The ten programmers were spared an estimated six months of development in a new language, away from their core duties. I worked with the entire team (management, ops, programmers, documentation, sales, marketing, and client support) to install and shepherd the **iAnalyzer Portfolio Analyzer** product, which became a major revenue stream for Vestek.

Barclays Global Investors had a trading application that failed frequently every day, on a floor where the securities lending traders using this application needed rapid responses every second. I was nervous when I noticed that with each person, I was introduced as “the Silver Bullet guy.” However, after sitting with the traders and fielding their help requests live, and then profiling the application, I was able to reduce memory footprint tenfold and to reduce start-up time tenfold. Through some good, old sleuthing, I also solved threading and EJB problems, which eliminated the daily crashes that terrified the traders.

Skills ::

Languages: Java (17 years), Javascript, Delphi/Object Pascal, C++, Webmacro/Velocity, Tcl, Python, JSP, XML/DOM, XSL, HTML, CSS.
Frameworks: J2EE, EJB, Swing, Struts, Webmacro, Drupal/PHP, Delphi, jQuery, Spring, RestEASY, JAX-RS, Hadoop. **Tools:** Ant, Maven, JUnit, TestNG, Log4J, Git, CVS, Subversion, Eclipse, IntelliJ IDEA, Tomcat, Jboss. **Databases:** Hibernate, PostgreSQL and PL/pgSQL (stored procedure language), MySQL, Oracle, Sybase, Nuxeo DM, eXist (XML database with OQL), db4o (Java object database), MongoDB.
Platforms: Windows NT/2000/XP, Redhat Linux, FreeBSD, Ubuntu, Solaris/SunOS, MacOS. **Administration:** Linux, FreeBSD, Solaris, Apache, Squid, SSL, Tomcat, Unix security, Windows administration, and Webmastering.

Experience ::

April 2013 – September 2013: Flurry.com, Sr. Java Developer, Analytics Team, Responsible for server-side Java development and management of the large Hadoop/HBase/Web cluster.

September 2012 – April 2013: TriveraTech.com, Contract Trainer. I provided on-site and online training in Java, JEE, XML, JavaScript, jQuery, GWT, and web development.

July 2011 – Present: Marakana.com, Contract Trainer. I provide on-site training in Java programming, Tomcat administration, and Apache httpd administration.

June 2010 – June 2011: U.C. Berkeley, CollectionSpace project, Sr. Java Developer. Responsible for server-side Java development, design, refactoring, and review of the service and persistence layers. I developed XmlReplay, an automated service layer test tool for the project.

May 2008 – June 2008: AirPlay.com, Contractor: Sr.Java Developer. Reported to director of technology, developed a load/stress test process, presented scaling results and recommendations, and optimized the build process.

October 2006 – February 2007: Charles Schwab, Contractor: Sr.Java Developer. Developed Struts pages and Action classes for deployment in Weblogic; refactored Java class hierarchy; reviewed architecture for the SchwabInstitutional.com team; optimized the team's Eclipse setup and Ant build.

June 2005 – September 2006: HollowTheater.org, Develop a multi-screen digital video theater space, utilizing an array of Linux servers, coordinated in real-time. Became adept at aspects of shooting, recording, and post-production of video and audio from a seven-camera array and sixteen audio inputs using Final Cut HD Express non-linear video editing environment and ProTools audio mixing environment.

Feb 2005 – June 2005: Barclays Global Investors, Contractor: Java Developer. I was tasked with increasing application stability, and optimizing performance. In addition, I made improvements to the team's Eclipse setup, installed Log4J into the system, and got JUnit tests working for the automated build.

1997 – 2004: Thomson Financial/Vestek, Java Developer/System Architecture. Reported to the VP/System Architect. I was responsible for architecting, developing, and maintaining the **iAnalyzer** product, which served all Vestek Portfolio Analyzer web clients. I was also responsible for creating custom Delphi controls for Windows.

1996 – 1997: EDS (Electronic Data Systems), Delphi Specialist. Custom control design, system programming, and mentoring of Delphi programmers. I led a four-person team and architected the middleware for a distributed system interfacing to Windows, Web, and an Interactive Voice Response phone system.

1995 – 1996: Miscellaneous consulting jobs, including office automation scripting, CAD software development, C++, Access, Visual Basic, and Borland Delphi. I also started and hosted the **Delphi East Bay User Group**.

1989 – 1995: Old School Carpentry, Owner. I owned and operated a residential general contracting company specializing in design, remodeling, and custom cabinetry / millwork. I met with clients to gather their requirements and help them design their projects, and managed a team of employees and subcontractors.

Education ::

1989, U.C. Berkeley: BS in Mechanical Engineering

1986, Peralta Community Colleges: Associate degree in computer science