2313 New York Ave #2
Union City, NJ 07087

William Heger
Senior Developer

(609) 216-4955
will@hazersystems.com

Objective Generalist programmer with 10 years of Senior Development experience followed by 5 years of independent contracting seeking full or part time contract assignments, ideally on a telecommuting basis. Such a remote working arrangement would permit occasional attention to an ongoing software start-up, however being based close to New York City, on-site visits to locations in the metro area are certainly feasible.

Technology Sweetspots

Java Development

Platforms: Server/Servlet, Android
Scaffolding: Spring, JUnit (jMock, Hamcrest), *Maven, *Ant, *Logback, *Trac, *SVN/SVNKit
Content & CMS: *Apache Cocoon, iText, Apache Lucene, Apache FOP, RenderX XEP
either plugin development or framework internals experience

Web Development

Servers: Tomcat, Jetty, Apache, Node.js, lighttpd
Browser: HTML/JavaScript, JQuery/UI, Bootstrap, YUI

Datastores

SQL Databases: Oracle (w/ PL/SQL), MySQL, PostgreSQL
NoSQL: Redis, CouchDB

Wires and Protocols

Transports & "Qs": WebSockets (Autobahn, Socket.IO), AJAX, UDP BCast/MCast, ZMQ, RabbitMQ
Protocols: HTTP/REST, SOAP/WSDL
Transformers: XPath/XSLT, SAX, DOM, StaX, XSL:FO, JSONPath, Jackson, GPath

Mobile Development

Android: Intents/Receivers, AIDL, Services, Multi-thread & Multi-process,
Kivy, Python-for-Android, Networking (ZMQ/UDP/WebSocket/REST/NTP)

Design Patterns and Methodologies

Concurrency: Actors, Event Loops/Reactors, Dataflow, Threads
Architectures: Event Source, CQRS, MVC/MVP
Object Oriented: Most GoF Patterns, IoC
Methodologies: XP, Scrum, TDD

Other Comfort Zones

Languages: Python, Groovy, Perl, C, VB
MS Development: MS-Access Client and Client/Server Apps, MS-Excel Plugin Development
Google: Google Data API, Chrome Plugin Development
Systems: *nix Provisioning and Scripting

Employment Summary

Hazer Systems (2012 Forward) Self-funded software start-up developing a unique mobile framework that enables both cloud-based and peer-to-peer transactions for business and retail applications. Further detail will be provided upon request and written agreement of non-disclosure.

Positive Expectation, LLC (2009-2012) Formed in Nevada, "PosEx" was created to manage the finances of a 5 member tournament poker team. I handled the tax accounting, expenses, logistics, wrote training and simulation software, and personally won over $250K across 2.5 years of live tournament poker.

William Heger Consulting (2006-2012) As a private software contractor, I was the sole developer on around eight contracts totaling approximately $267K revenue. Further detail is provided in the **Domain Experience** section.

Vishay Intertechnology, Inc (1996-2006) For 10 years, I lead a team of 5-8 developers and designers within the Global Marketing and Communications Department of a Fortune 500 multinational electronics firm. Further detail is provided in the **Domain Experience** section.

Harte-Hanks, DiMark, SmithKline Beecham (1992-1995) Various computer operations positions, (tape librarian, printer operator, console operator) in mainframe-oriented datacenters during high school and college.

References can be furnished for all work experience past 1995.
Specific domain experience and education covered on the following page.

2313 New York Ave #2
Union City, NJ 07087

William Heger
Senior Developer

(609) 216-4955
will@hazersystems.com

Education

Professional Development: (1996 Forward) Although I did not study computer science in school, I have aggressively pursued opportunities for improvement, including but not limited to: attending the New York Design Patterns Discussion Group, Edward Tufte's Course on Presenting Data and Information, as well as avidly reading reddit/r/programming, Lambda the Ultimate, and numerous framework newsgroups. I have developed production software in more than 8 programming languages, crossing the desktop, the browser, the database, the server, and most recently the handheld.

Drexel University (1993-1996) Left in my senior year before completing my Bachelors in Mathematics to begin working at Vishay Intertechnology. Applicable coursework and experience: Linear Programming, Differential Equations, Discrete Mathematics, Graduate Level Probability and Statistics, Game Theory, Maple, Matlab, APL.

Scholarships and Distinctions: AJ Drexel Scholarship, National Merit Scholarship, Levittown Rotarian's Scholarship, Drexel Freshman Physics Award, Elected Student Dean of Arts and Sciences.

Czech Semester Abroad (Fall 1995) Studied Comparative Economics through a program sponsored by the University of Nebraska Omaha and Palacký University of Olomouc.

Domain Experience

Search...

"by Parameter"

In 1998, I developed a parametric search tool for Vishay that used hidden frames to perform the kind of "live update" we now commonly associate with AJAX. Vishay's Parametric search allowed the visitor to select which criteria she desired to filter on, then as parameters were selected, incompatible parameters were removed from the interface. This was all done without the need for an explicit "submit" or page re-render. This provided a faster and more intuitive experience while entirely eliminating the dreaded "no results" response.

"by Expert System Text"

The passive electronics industry usually employs a descriptive part numbering scheme ie. an alphanumeric string that encodes four or more parameters -- millions of individual parts can be described using a single part scheme. Oftentimes, these parts arrive with missing parameters, transposed elements, or garbage text. Furthermore, end customers frequently use natural expressions like "10 ohms" or "5%" in place of part codes. Discerning the user's intent despite these malformations and ambiguities requires translating the skills of a part decoding expert into machine rules. The Vishay Part Decoder was deployed as a service with hooks to SAP, Excel, and the Public Web.

"by Keyword Text"

Several keyword indexing systems were used at Vishay including Ht://Dig and Apache Lucene. Also, knowledge of keyword indexing was applied in our SEO work. For example, Vishay is the first company listed on Google for the keywords "Capacitor" and "Resistor" as well as many other common electronic component terms.

Web Architecture

At the end of my period, www.vishay.com was serving around 20K unique visitors a day, 30M hits per month, and its product catalog spanned tens of thousands of HTML and PDF documents. The site had been internationalized and used content negotiation to serve English, Japanese, and Simplified Chinese. Part search tools, pdf generators, spreadsheet generators, sample requests, inventory searches, are only a few of the many dynamic features of the site. In addition to guiding or directly developing all of these features, I designed and implemented Vishay's 3-tier architecture utilizing Apache listeners, Tomcat Servlets, and an Oracle Database tier.

Product Data Management

Supporting www.vishay.com was a mammoth Enterprise Content Management database that fed parametric data into Vishay's Product Data Management System. Ten of thousands of technical documents were pulled from departments all over the world, parametric data was extracted from these datasheets, and after homogenizing, stored in company's product database. At various times, the system pulled content from MS-Access, Excel, and Oracle, but principally parametric data was extracted and transformed directly from Adobe FrameMaker's XML model.

The Multinational Enterprise

Communicating with internal stakeholders, across departments and in many cases internationally, to analyze business requirements and deliver solutions, describes the bulk of my tenure with Vishay. "Managing the Client" throughout the project using mock-ups, prototypes, and an iterative approach to delivery, were common strategies. However, in cases where requirements emerged from interviews I conducted with direct and third party customers, presenting findings and making proposals was aimed more towards winning buy-in from key players than assessing needs. The latter required more finesse but often amounted to ensuring that all voices had been heard.