# Clay Carpenter

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Technology generalist, equally comfortable crafting code or documentation, whose work is enriched by wide-ranging experience in topics such as secure backend web services, rich web applications, user interface design, technical documentation, and project management.

# **Core Strengths**

- An insatiable curiosity and desire to learn produces a constant honing of skills and allows for the flexibility to meet and overcome new challenges.
- A strong development foundation resting upon years of experience. The experience is focused in Java but complemented by working knowledge in other languages such as Python and PHP.
- Capable of producing designs and carrying them from the wireframe stage all the way through implementation, using a core UI skill set that includes HTML, CSS, and JavaScript.
- Experienced in developing solutions on a wide variety of platforms, from PHP plugins for WordPress to complex J2EE solutions.
- Skilled and experienced in assessing business client requirements, working with the clients to refine and clarify expectations, and then transforming business goals into development specifications for project developers.
- Polished communications skills, with a focus in the area of written documentation. Able to communicate effectively with a wide variety of audiences, from end users to engineers.

## Skill Set

Front End Technologies:

jQuery, GWT, Dojo, JavaScript, HTML, CSS, JSP, XSL/T

Back End Technologies:

• Java, Python, PHP, EJB3, JPA, Hibernate, Web Services, Servlets

Databases:

• Oracle, MS SQL, MySQL, HSQLDB/Hypersonic

**Application Servers:** 

• jBoss, Tomcat, Weblogic, WebSphere

Build Systems:

Ant, Maven

Source Control Systems:

• Git, SVN, ClearCase

## Certifications

- Sun Certified Web Component Developer
- Sun Certified Java Developer
- Sun Certified Java Programmer
- A+ Certified Hardware Technician

# **Work History**

## Self-Employed - 2011-Current

## Development

- To make it easier to track project tasks, I built a desktop client for the Google Tasks service named CogGrinder. Written in Python, the open source CogGrinder provides functionality not available in Google's Tasks web interfaces.
- Typ0 is an open source typing game that focuses on helping programmers improve their typing in the syntax of their language of choice. Users load their own source files and then are challenged to type a number of lines from the file; scores are based on speed and accuracy.
- Built the open source WordPress plugin GetGit in order to embed public GitHub content into blog posts for the purposes of illustrating code examples and building educational articles.
- In the process of developing an Android application that would allow users to log their workouts and track progress towards their goals.

#### Design

- Created the Typo HTML/JS game UI, taking design inspiration from early computer terminals.
- Designed the CogGrinder UI, from early wireframes on to the final implementation of the desktop client.
- Composing the design for an Android application, working through multiple versions of wireframes to produce mockups that represent most of the key screens and user interaction points in the application.

## Management

- Performed market research for potential fitness tracking and language learning Android apps, including competitive analyses, feature list development, and user story creation.
- Conducted multiple rounds of business idea viability surveys via Amazon Mechanical Turk.

## Trident - 2011

## Tech Writing

- Developed administrator, user, and install guides for a military secure chat product.
- Combined development experience with written communication skills to write or edit high and low level design documents for many projects.

## Quality Assurance

 Supplemented small QA staff by providing software quality and user experience feedback and filing bugs as I documented the system.

#### DZone - 2010-2011

## • Project Management

- Managed two StackOverflow-like projects, the existing open source Python web app OSQA and the upcoming Java/OSGi product Qato.
- Oversaw small team of four developers and two designers. Two of the developers were remote, working from their homes in Europe. Project management was conducted primarily through JIRA, supplemented by frequent one-on-one discussions with team members.
- Project lead for custom development work done for Splunk, which focused on creating a
  customized implementation of OSQA. In this capacity I communicated regular status
  updates with the client, assigned tasks and milestones to the team, and acted as quality
  assurance for work performed.

#### Trident - 2008-2010

## Development

- Developed a secure government content aggregation server using Java, web services, and a custom single sign-on solution, on top of a foundation provided by OpenPortal.
- o Integrated the JavaScript editor TinyMCE into a broader GWT project.

## Tech Writing

- Authored documentation to comply with governmental contract specifications for a number of projects, including CDC, CDVoIP, and Collaboration Gateway.
- Worked with the QA staff to assist in recording and tracking defects, as well as ensuring security compliance documentation was accurate and executable.
- Conducted interviews with the development staff on an ongoing basis to increase the accuracy of the technical documentation and help the developers explain their design goals.
- Provided proofreading and editing services for the rest of the staff.

## Motricity - 2008

#### Development

- Worked with a small team of developers to enhance the Cricket wireless sports portal, building the solution on a foundation of standard J2EE components, Weblogic, and custom in-house modules.
- Assisted systems administrators in setting up and testing new development and QA environments.

#### McKesson - 2005-2007

#### Development

- Developed a rich web front end that featured user-customizable forms. The solution bound model and view together via XSL/Xpath, and presented the results with extensive components based on Dojo.
- Created XML-backed data models on top of Hibernate for consumption by the XSL front end.
- Prototyped a replacement web forms solution using GWT.

#### Management

- Acted as software architect/team lead for the customizable forms project. In this capacity I
  assisted with scheduling project milestones, assigning tasks, and with personnel
  decisions.
- Took the lead in evaluating a number of directions for the project, from initial implementations using OpenLaszlo to the custom XSL/Dojo solution and finally to the prototype of that project's successor in GWT.

# GlaxoSmithKline - 2003, 2004

#### Development

- Built a comprehensive framework that was used for all contemporary web applications. The framework greatly simplified many of the most common tasks for developers, including collecting user input via web forms, validating that input, and persisting it to Oracle databases.
- Authored a detailed documentation suite, from executive summary and quick start guide to full JavaDoc API documentation. The documentation aimed to assist other developers in adopting the framework for their projects and communicate the framework's value to shareholders throughout the department.
- o Developed sites for Advair, Levitra, and Flonase; converted others from Perl to Java.
- o Converted the graphic designs submitted by creative agencies into HTML implementation.

## Self-Employed - 2001-2003

## Development

- For the Red Eye music distribution company I developed a custom content management web application that enabled artists to submit and cultivate their own content on the record label's site.
- Developed a small ASP web app that allowed students interning with UNC's department of medicine to submit their internship reports online. Persistence was provided by an existing FoxPro database.
- Designed and built the core of a large contact, accounting, and inventory management app.
   The app was written in Java/JSP with a MySQL backend.
- Wrote a web app frontend to an existing Access database for The Holland Grill Co. that allowed better tracking of customer service interactions.

#### Management

- Worked directly with clients, gathering requirements and feedback to better define upcoming milestones and refine the existing solutions.
- Developed and used a small ASP web app that assisted in collecting and organizing requirements and proposed solution designs.

#### System Administration

- Provided on-call IT support for The Godfrey Group, a small local business with roughly 30 workstations. Support tasks included maintenance of the hardware and software of client machines, installation of networking equipment and cabling, and administration of a linux file server.
- o Provided support for Windows file, web, and mail servers for Red Eye.

#### Thinksource - 1999-2001

- Development
  - o Developed and maintained internal time tracking web applications in Perl and Java/JSP.
  - o Built a small "current news" web app for Duke University's Genomics department.
- System Administration
  - Provided hardware and software support to a small collection of client machines that included Windows and Macintosh OSs.
  - Setup and supported a handful of linux servers that provided web, mail, DNS, file, and application services for both internal employees and external clients.
  - o Installed and maintained the networking cabling and hardware for the company.

# Education

North Carolina State University - 2002-2005 B.S. in History of Technology with a Minor in Computer Science

Wake Tech Community College - 2000-2002 Associates of Science Program

# References

Available upon request.