**Joseph V. Crawford Jr.**

PO Box 141 - Adams, MA 01220

Phone: 1-781-346-9656 **-** E-Mail: info@josephcrawford.com

**SUMMARY**

Offering extensive experience with very high traffic websites using PHP 4, PHP 5 and MySQL. Self-motivated, high energy, dedicated professional with superior leadership and communication skills.

**Skills**

**Languages**: PHP 4/5, HTML, XHTML, CSS, JavaScript, XML, XSLT, SOAP, REST

**Frameworks:** Zend Framework, CakePHP, CodeIgniter, JQuery, Prototype, Google Maps

**Design Patterns**: Singleton, Factory, Observer, MVC

**Applications**: Zend Studio, Eclipse, Coda, NetBeans, Komodo IDE, SVN

**Protocols**: HTTP, VPN, SSH, Telnet, FTP, SFTP

**Application Server**: Apache, IIS

**Operating Systems**: Windows, Linux, OS X

**Database Systems**: MySQL, SqLite, MS SQL, MS Access

**Certifications**: Zend Certified Engineer (PHP 4)

**Experience**

**Acronym Media 10-2012 / Present**

*The Global Leader in Search Engine Marketing*

**PHP Engineer**

**…**

**CampusLIVE / Dailybreak 02-2012 / 10-2012**

*CampusLIVE entertains, educates and challenges people through interactive content based on real world topics.*

**Senior Software Engineer**

Today’s digital content is engaging, rewarding, interactive and social. Today’s digital content delivers social action – and no one knows more about delivering social action than Dailybreak. Dailybreak provides unique advertising solutions with laser-focused targeting, engaging content, and guaranteed results.   
  
While working at this company I was asked to oversee a junior developer and help to mentor him on current best practices. In the beginning I was the point person for determining which tasks he received from JIRA however in the end that was taken over by the project manager and I was left to mentor and oversee that the other developers tasks were being completed on time.

What I accomplished

1. Optimized SQL queries ensuring proper indexing
2. Reduced total SQL queries for loading the front page by taking advantage of Memcache and caching data properly. I was able to bring the query count down from 186 to 83 which also improved the load times by 50%.
3. Overhauled the user profile and created new functionality where users were rewarded coins for providing certain profile information.
4. Removed the site-wide reliance on schools as the re-brand to Dailybreak was opening the site for the public.
5. Implemented Demographic filtering for challenges so that the content team could specify that only certain types of users could see the challenge. Demographic had the following filterable fields. Age Range, Gender
6. Implemented geo targeting currently based on matching the last 3 digits of a zip code, was planning to migrate to special geo targeting using latitude / longitude using Solr Spatial Queries.
7. Created an admin tool for bulk crediting users with coins. Enter a CSV of user id’s and enter the amount you wish to credit.
8. Created a PHP CLI Script which was run via cron every Saturday at 4am. This script would clone our production database and importing it to keep the staging environment up to date. This script took full advantage of the AWS SDK for PHP.
9. Created the Advertising Demo page consuming a lot of code that was already created. During the initial load of the page if you are not logged into the site a demo user is created and you are automatically logged in. This allows potential customers to demo challenges without actually having to register for the site. At the end of the challenge was a button that could be clicked to restart the challenge, this allowed for a user to run over the same challenge multiple times by removing the demo user from the challenge.
10. Created the AdWeek demo for use at the AdWeek convention. This was much like the Advertising Demo page except all data related to a user was retained and not deleted.

Technologies Used: PHP, MySQL, Zend Server, Memcache, JSON, Javascript, (JQuery), CSS, Solr, SSH, AWS, SVN

**Contractor at GSN 06-2011 / 02-2012**

*The world needs more winners!*

**Sr Software Engineer**

Delivering server side API’s for the front-end flash team to consume for a Facebook game which we will be launching near the end of the year. I have also been tasked with creating the administration area which will be used to administer the application but also by Customer Support for the game. Designed with the permissions in mind each administrator user can be assigned to any number of tools. The administrator will only be able to access tools that they have been granted permission for. Tools thus far include the Admin tools which require the highest clearance and allow you to add new administrators. The player services tool is used for Customer Support so that they can credit/debit players with the in-game resources. I also created a transaction log for every resource type in the game. To create this log I used jQuery with the DataTables plugin and worked with the DataTables API to manipulate the table in real time without having to reload the page. I have also worked on a QA Tool that allows the QA team members to create, delete and make friend connections with Facebook Test users. This was all accomplished by consuming the Facebook Graph API.

Also I have been maintaining and enhancing the current released games which are Wheel of Fortune and Jeopardy. The new game we are creating is in partnership with a large media company which cannot yet be disclosed, we expect the game to be a hit due to the target demographics.

What I Accomplished

1. Architecting and developing the server-side REST API which is consumed by the Front-End games. In this case it was our first game based on the API, however we were developing the API to be usable by many games.
2. Developing the administration area so that the admins could administer the game. The Customer Support team would also use the administration area to award different in-game items and currency to different users. The admin UI made full use of JQuery and the Datatables plugin for the UI requirements. There was custom development to the datatables plugin to allow for collapsible statistic panels and also to allow for in-line editing of data. When editing in-line only the columns that were modifiable were editable.
3. Created a QA tool that would allow the QA team to quickly generate Facebook Test users and manage friend relations between those users. These test accounts were used during the QA process for testing the in-game functionality relating to friend relationships.
4. Integrated the API with facebook for in-game currency purchases.
5. Maintained and added UI changes for Wheel of Fortune and Jeopardy legacy games.

Technologies Used: PHP, JQuery, Memcache, JSON, CSS, SVN, Facebook API

**NOKIA INC 02-2010 / 06-2011**

*The world leader in mobility, driving the transformation and growth of the converging internet.*

**Software Engineer**

Delivering mobile applications to millions of end users is not an easy task. Working on the Ovi Store has proven to be one of the most challenging projects I have worked on to date. Most of the day to day challenges do not actually pertain to developing php at all. Most of the issues crop up when dealing with all of the different environments and working with teams in other time zones. While I have found this project to be challenging I also find it to be very rewarding and exciting. I am not the type of person to be stopped by a challenge.  
  
Over the last few months our development team has seen the downloads per day jump from 2 million to upwards of 4 million. I think this has made us work even harder as we are starting to see the fruits of our labor.  
  
Working with the Ovi Store entails working with Oracle, Memcache, APC, SVN, VPN, SSH and a lot of internal API based services for things like Purchasing, Signing In, Content Delivery and more.  
  
My development environment for work consists of running Ubuntu as my desktop and Zend Studio for my IDE, gSTM for setting up tunnels, VIM/VI for command line editing on the servers.

What I Accomplished

1. Contributed to developing and architecting the API layer for the OviStore 2.0 project. Created a Restful API that used Oauth headers for authentication. The API layer was the single point of communication for the Mobile Site, Desktop Site and any Device Client which had a native client application.
2. Implemented visibility rules for products based on country, this opened the store to countries like Iran which does not allow any premium content
3. Implemented a new pricing matrix that supported both Credit Card billing and Operator billing, this opened the market to new countries like India which do not allow Credit Card billing. The new pricing matrix also allowed for each operator to set their own prices for the applications.
4. Implemented a Solr/Lucene layer for searching for products to increase performance.

Technologies Used: PHP, MySQL, Zend Studio, Memcache, JSON, Javascript, (JQuery), CSS, Solr/Lucene, SSH, SVN , Soap, XML

**Tatto Media 10-2009 / 01-2010**

*A smart advertising company with intelligent platforms.*

**Software Engineer**

Tasked to create a bidding system using Cake PHP and PHP 5 so advertisers can log-in and create bids that are based on a set of criteria and a dollar amount they wish to pay for each conversion. Also responsible for work on the Tatto Display network. Using Ubuntu on the desktop, currently working on the Tatto Publishers and Advertisers network. Also, using technologies such as rsync, scp, ssh, svn, PHP 5 and the CakePHP framework, currently working on the reporting section to integrate AJAX flash charts (FusionCharts) which will work seamlessly with the reporting. Started working on the Content Lock mechanism which they will market next. This content lock is a mixture of PHP/JS making things work smooth. I am mostly working on the backend PHP stuff while also trying to work on some of the JS stuff.

What I Accomplished

1. Created a content locking mechanism using Javascript/CSS and server-side code for validation.
2. Used CakePHP to create an advertisement bidding platform

**Namespace (Contract) 06-2009 / 10-2009**

*Namespace's goal was to create a URL Free Internet; they believe that everything should be run by keywords.*

**Web Developer**

As the sole developer at the company, used PHP 5, CSS, JavaScript, XML, CSV, HTML to create a new reporting system for clients using Object Oriented PHP 5. Clients became able to access the web front-end to visually view the data in the browser and download CSV or XML formats as well as fetch the data using methods such as cURL or wGet over HTTPS. Also solely developed an ISP Keyword system that uses an API or web front-end to automate the process, I used the Zend Framework to complete this task in a timely manner.

What I Accomplished

1. Using the Zend Framework 1 I created some admin tools for the company to manage customers
2. Created a management tool for customers to manage and import keywords
3. Modified the navigation engine for performance
4. Tasked to learn Java I created a simplistic benchmark tool using HTTP 1.1

Technologies Used: PHP, MySQL, CakePHP, JSON, Javascript, CSS, SVN

**Castle Communications 01-2008 / 04-2009**

**Web Developer**

Integrated a full CSS layout into the Webdate.com codebase. The task was challenging because the site was under no template control. All of the code was mixed in with the HTML markup for the site. Also tasked with the responsibility of rewriting the mobile API they had for Webdate. Created an API that provided all of the data necessary so that a 3rd party company displayed it to the end user in a format their phone would understand. The data was in pipe delimited format and included binary photos. The API was rewritten to make the code cleaner, faster and use a more restful approach.

Created a new Web 2.0 Social Networking site as part of the Politics.com project. Similar to Youtube, Facebook, Myspace, the site could upload photos, videos, make comments, start debates and manage your friends. Added the ability to mark a person as a foe which prevented you from receiving messages from that person with the added control of being the only one able to remove the designation of foe. Used a 3rd party web service to gather the data on the politicians for use on a politician map and pages.

Technologies used on both of the above projects: PHP 4/5, MySQL, CSS, JavaScript (jQuery).

Much of the work was done remotely through the use of SVN and SSH, with an occasional trip into offices in Timonium MD and Alexandria VA.

What I Accomplished

1. Fixed bugs, implemented messaging system and maintained webdate.com
2. Implemented a new layout into the codebase for webdate.com
3. Migrated to Politics.com which was a web 2.0 social network. Created the friends feed
4. Created the ability to have friends and foes, foes were people you did not want to communicate with or see any content authored by them
5. Created a debate platform which was a custom forum the first thread was the topic and others could communicate through posts.
6. Implemented a profile picture javascript cropper
7. Used ffmpeg for server side processing of videos uploaded by users

Technologies Used: PHP, MySQL, JSON, Javascript, CSS, SSH FFMpeg, SVN

**eFashion Solutions 07-2007 / 12-2007**

**Web Developer**

Integrated new features into the code bases for each individual site. Used SVN, CVS and SSH to work remotely. Helped to integrate the coupon system into the base code for all sites using the eFS framework and used Authorize.net for the payment gateway. Developed the following websites:

* http://www.babyphat.com/
* http://www.dkny.com/
* http://shop.orangecountychoppers.com/
* http://www.mandee.com/
* http://www.rocawear.com/
* http://www.applebottoms.com/
* http://www.shopmary-kateandashley.com/

**ERE Media 02-2007 / 07-2007**

**Web Application Developer**

Converted existing Microsoft based solution over the LAMP stack. Created a job portal using PHP 5, JavaScript, CSS so that as you searched the jobs that were in the database, they were plotted on a Google Maps mashup. Zooming into a particular area on the map (i.e., Boston), the search results would be filtered to only show what was on the map. This project also allowed recruiters to purchase posting packs that would allow them to post jobs to the site. Researched feasibility of a single sign on page for the network of sites. Used the CodeIgniter PHP framework for rapid development and to gain the MVC advantage.

What I Accomplished

1. Fixed bugs and implemented new features on high traffic e-commerce sites
2. Implemented a coupon system into 5 of the sites managed by the company. At the time there was not a framework each site was a copy/paste from another and took it’s own path. It was a bit cumbersome integrating the coupon system due to this.

Technologies Used: PHP, MySQL, Javascript, CSS, SSH, VPN, SVN

**eFashion Solutions 08-2006 / 02-2007**

**Web Developer**

Integrated new features into the code bases for each individual site. Used SVN, CVS and SSH to work remotely. Helped to integrate the coupon system into the base code for all sites using the eFS framework and used Authorize.net for the payment gateway.

What I Accomplished

1. Fixed bugs and implemented new features on high traffic e-commerce sites
2. Implemented a coupon system into 5 of the sites managed by the company. At the time there was not a framework each site was a copy/paste from another and took it’s own path. It was a bit cumbersome integrating the coupon system due to this.

Technologies Used: PHP, MySQL, Javascript, CSS, SSH, VPN, SVN

**LicketyShip, Inc. 05-2006 / 08-2006**

*LicketyShip is a same day delivery service provider.*

**Lead Web Developer**

Created the company Codebowl Solutions to work at LicketyShip as their sole developer and liaison to an outsourced team in India. Eventually hired and managed 4 other developers. Worked with extremely short deadlines using 100% custom PHP 5 which made use of external web services and necessitated a lot of calculations that included delivery costs, costs per mile, costs per minute wait time, etc. All of the products on the site were scoured from a partner company by screen scraping with permission. The partner company wanted to see just how much being a part of this delivery service would increase its revenue before having their developers create an API for consumption. Calculations were used to choose the best delivery provider and shortest route for the customer so that costs were kept down. In order to alert the couriers we also had to integrate with an online faxing service so that a fax would be sent to the courier notifying them of the scheduled delivery. Technologies used: PHP 5, CSS, JavaScript, XML, SVN, SSH, VPN, SOAP.

What I Accomplished

1. Developed a scraper written in PHP 5 that would scrape the vendor site for all products nightly. The scraper was being run with permission from the vendor.
2. Implemented web services to get street by street directions and total real distance (not based on straight line)
3. Implemented logic to choose the best courier based on the cost per mile, cost per pound, etc for the product the customer wishes to have delivered
4. Implemented complex logic based on several factors to determine the lowest possible delivery cost for the customer.
5. Implemented auto notification of order for couriers using an online fax api and sending emails as well
6. Started to implement a real time platform where couriers could see the new orders and accept the order. The longer the courier waited to accept the order the less they were paid, the fee for delivery was decreasing with every minute passing.

Technologies Used: PHP, MySQL, Javascript, CSS, SSH, SVN, Soap, XML, JSON, Web Services, cURL

**Codebowl Solutions, Inc. 05-2005 / 01-2008**

**President**

Developed and maintained new and existing clients’ websites. Worked with both large and small companies. Used PHP and MySQL. Consumed 3rd party web services, setup and custom developed e-commerce solutions for customers. Led a team of 5 developers. Clients: http://www.codebowl.com/

**Freelance Developer 01-2000 / 05-2005**

Created several sites using technologies such as PHP, MySQL, CSS, JavaScript, SSH, SVN, CVS. Developed an online store using custom PHP code and integrating with PayPal for the payment processor. 3030knives.com was developed for an eBay seller who wanted his own online presence. Also developed an online store for a company in Canada that developed custom performance parts for the Mazda RX-8 automobile. Created an online store for an individual who wanted to sell candles and soap online.

**St. Johnsbury ECC 01-2000 / 05-2005**

**Site Monitor**

Duties included monitoring people who were using1-5 computers. Made sure that the machines were being used efficiently. Helped people use programs like Microsoft Office. Started using AOL Press (WYSIWYG Editor) for doing an HTML website for the ECC.

**Training / Courses**

Zend Training, PHP Essentials, 2005

Zend Training, Professional PHP Development, 2006

Oreilly School, Linux / Unix 1: The Unix Filesystem, 2007

**References**

Russ Hammer – [russ@namespaceinc.com](mailto:russ@namespaceinc.com)

Mike Hankey – [mike@castlecomm.com](mailto:mike@castlecomm.com)

Anthony Yockey – [ayockey@yockey.com](mailto:ayockey@yockey.com)

Jim Dalton – [jim@ere.net](mailto:jim@ere.net)

Joshua Freeman – [jf2412@columbia.edu](mailto:jf2412@columbia.edu)