Goran Halusa

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In the beginning, I dove into the web as a UI/UX Designer. With a burning need to know it all, I have molded myself to become a true full-stack developer, with expertise in UI/UX design, programming, and systems administration. I am currently a Scientific Web Applications Developer for the National Cancer Institute's Advanced Biomedical Computing Center, Leidos Biomedical Research, Inc. Before that, I spent 6 years at NASA's Goddard Space Flight Center supporting NASA's Earth Observatory team and NASA's Atmospheric Sciences and Hydrospheric and Biospheric research laboratories. My early gigs were with several web shops in Raleigh, NC and Upstate New York. Some of my tools include PHP (OOP/MVC), MySQL, Javascript, jQuery, node.js, mongoDB, Git, Slim PHP Micro Framework, Twig Templates, Ruby, and Sinatra.

Currently at: Leidos Biomedical Research, Inc. | Past: NASA GSFC.

You can learn more about me at Geeklist.

Technical Skills

Like: php, mysql, javascript, jquery, node.js, mongodb, amazon-web-services, slim, wordpress, css, html5, twitter-bootstrap, twitter-api

Experience

Scientific Web Applications Developer – Leidos Biomedical Research, Inc. *November 2009 - Current*
php, mysql, javascript, jquery, slim, twig, gump, wordpress, drupal, apache, linux, debian, ubuntu-12.04, amazon-web-services, git, bitbucket, svn

Full-stack web developer for the National Cancer Institute's Advanced Biomedical Computing Center. I develop, design, and maintain websites and scientific web applications, implementing open-source technologies such as Object-Oriented PHP, Javascript, and MySQL, with deployment on Linux-based platforms. I'm constantly improving and building upon best practices and latest technologies. Well-versed at full life cycle project management, from conception, through deployment, and beyond.

Web Developer – NASA GSFC *October 2003 - October 2009*
php, mysql, javascript, perl, linux, centos, apache, squid

Web designer, programmer, and systems administrator for the Earth Observatory Website, Visible Earth Website, Laboratory for Atmospheres, and the Hydrospheric and Biospheric Sciences Laboratoryat NASA Goddard Space Flight Center.

Details

I programmed NASA's Earth Observatory website from scratch (version 2.0, 2009). This entailed writing multiple PERL scripts to ingest 10 years of website data into a redesigned database schema and filesystem. I also developed a highly customized content management system to serve the needs of the highly talented staff of writers and data visualizers. I was also the systems administrator for the small server cluster, configured for high availability and redundancy.

Additionally, I built the first custom content management system and redesigned the public-facing websites for NASA's Atmospheric Science Research Portal and Hydrospheric and Biospheric Science Research Portal.

Web Architect/Animation Artist – Virtual Flow Interactive Media, Inc. *October 2000 - June 2003*
photoshop, adobe-illustrator, html, asp.net, coldfusion, flash, director

Lead Designer of cutting edge graphical interfaces for web sites as well as interactive CD ROMs using programs such as Flash 5 & MX, Director 8.5, PhotoShop 7.0, ImageReady 7.0, Illustrator 10, GoLive 6, Dreamweaver 4 & MX, Dreamweaver UltraDev, BBEdit 6.5, Final Cut Pro 2.0, and Strata 3D. Implemented acquired knowledge of hand coding HTML, CSS, JavaScript, ColdFusion and ASP (Active Server Pages), as well.

Graphic Designer – Image Associates, Inc. *July 1998 - September 2000*
photoshop, adobe-illustrator, html, powerpoint, dreamweaver

Developed real world, hands on graphic design skills at a full-service graphic design studio offering a variety of services including print, multimedia, web design and corporate presentations for shows and conventions.

This was my first position in the industry, after 12 years of cooking professionally. I obtained the paid internship position thanks to my awesome instructor, Paul Cacioppo at the School of Communication Arts in Raleigh, NC. (Thanks Paul!)

Education

Certificate in Computer Graphic Design – School of Communication Arts *1998 - 1999*

Graduated top of class. As a result, instructor offered me a paid internship at Image Associates, Inc.

Certifications

Global Information Assurance Certification (GIAC) in Web Application Security *2006 - 2006*

Projects & Interests

GitHub - PHP Skeleton App – https://github.com/ghalusa/PHP-Skeleton-App *December 2014 - January 2015*
php, mysql, javascript, jquery, slim, twig, twitter-bootstrap-3

An MVC-based PHP skeleton application for rapid development

Author

GitHub - node-load-tweet – https://github.com/ghalusa/node-load-tweet *May 2013 - September 2014*
node.js

A small node.js script which posts a linux server's load and uptime to your twitter timeline.

Author

GitHub - Wordpress-Home-Page-Banner-Images – https://github.com/ghalusa/Wordpress-Home-Page-Banner-Images *March 2012*
php, wordpress-plugin

A Wordpress plugin to help manage rotating banner images

Author

Writing

Efficiently Selecting Random Rows From a MySQL Table - Goran Halusa : Halusanation –
http://halusanation.com/post/39329045165/efficiently-selecting-random-rows-from-a-mysql-table

It's tempting to simply use MySQL's RAND() function to select random records from a table. However, be aware of the pitfalls.

Parsing Large XML Files Using PHP - Goran Halusa : Halusanation –
http://halusanation.com/post/39329043298/parsing-large-xml-files-using-php

I ran into a situation where I needed to parse a large (1 GB) XML file in order to extract the data into a MySQL table. As usual, I did my initial round of research. First, I decided to use the DOMDocument PHP class.

Equivalent of /etc/hosts File for Individual Users - Goran Halusa : Halusanation –
http://halusanation.com/post/39329042240/equivalent-of-etc-hosts-file-for-individual-users

I really like the ability to set up aliases in an /etc/hosts file. However, I've always wanted the same functionality when logged in as a regular user.

Install node.js on a raspberry pi – http://halusanation.com/post/49221746344/install-node-js-on-a-raspberry-pi

The simplest way to get node.js installed on a Raspberry Pi using the ARM distribution.

Non-B DB v2.0: a database of predicted non-B DNA-forming motifs and its associated tools –
http://nar.oxfordjournals.org/content/41/D1/D94.full.pdf+html

Regina Z. Cer, Duncan E. Donohue, Uma S. Mudunuri, Nuri A. Temiz, Michael A. Loss, Nathan J. Starner, Goran N. Halusa, Natalia Volfovsky, Ming Yi, Brian T. Luke, Albino Bacolla, Jack R. Collins and Robert M. Stephens. Nucl. Acids Res. (2013) 41 (D1): D94-D100. doi: 10.1093/nar/gks955

The non-B DB, available at http://nonb.abcc.ncifcrf.gov, catalogs predicted non-B DNA-forming sequence motifs, including Z-DNA, G-quadruplex, A-phased repeats, inverted repeats, mirror repeats, direct repeats and their corresponding subsets: cruciforms, triplexes and slipped structures, in several genomes. Version 2.0 of the database revises and re-implements the motif discovery algorithms to better align with accepted definitions and thresholds for motifs, expands the non-B DNA-forming motifs coverage by including short tandem repeats and adds key visualization tools to compare motif locations relative to other genomic annotations. Non-B DB v2.0 extends the ability for comparative genomics by including re-annotation of the five organisms reported in non-B DB v1.0, human, chimpanzee, dog, macaque and mouse, and adds seven additional organisms: orangutan, rat, cow, pig, horse, platypus and Arabidopsis thaliana. Additionally, the non-B DB v2.0 provides an overall improved graphical user interface and faster query performance.

CPTAC Assay Portal: a repository of targeted proteomic assays – http://www.ncbi.nlm.nih.gov/pubmed/24972168

A growing trend in protein quantification is a targeted mass spectrometry (MS)-based technology called multiple reaction monitoring (MRM) or selected reaction monitoring (SRM). Here, we present the Clinical Proteomic Tumor Analysis Consortium (CPTAC) Assay Portal http://assays.cancer.gov/, a public repository of well-characterized, MS-based, targeted proteomic assays.

Panorama: a targeted proteomics knowledge base. – http://www.ncbi.nlm.nih.gov/pubmed/25102069

Panorama is a web application for storing, sharing, analyzing, and reusing targeted assays created and refined with Skyline,1 an increasingly popular Windows client software tool for targeted proteomics experiments. Panorama allows laboratories to store and organize curated results contained in Skyline documents with fine-grained permissions, which facilitates distributed collaboration and secure sharing of published and unpublished data via a web-browser interface.

Adding MongoDB to Mac OS X Startup – http://halusanation.com/post/98100618312/mongodb-macosx-startup

A quick and easy method to get MongoDB to launch at startup on Mac OS X.

How to Upgrade Node.js – http://halusanation.com/post/97895604727/how-to-upgrade-node-js

Steps to upgrade Node.js to the latest version using TJ Holowaychuk's (visionmedia) n module.

Tools

First Computer: Blueberry iMac
Favorite Editor: Sublime Text 2