

E: karthik.ksv@gmail.com, W: <http://karthikv.net>

KARTHIK VISWANATHAN

Profile: Undergraduate computer science major at Stanford University fluent in web development, skilled with Java/C/C++ programming, and interested in a technical summer internship.

Skills: 5 years of experience with Java, (X)HTML, CSS, JavaScript, PHP, MySQL, Apache, and Bash. 3 years of experience with C/C++. Familiar with Python, Django, x86 Assembly, and MATLAB. Well versed in Git and SVN version control. Skilled with WordPress, Codelgniter, and jQuery. Comfortable with Mac, Linux, and Windows. Accustomed with embedded programming and strong with object-oriented design.

Education: Bachelor's degree candidate in CS, High school diploma
Stanford University Class of 2015; GPA: 4.09
Lynbrook High School Class of 2011; Valedictorian; GPA: 4.0 unweighted

Projects/Experience:

Lateral Code: Founder of and technical writer at Lateral Code <<http://lateralcode.com>>, a web development blog covering both front and back-end concepts, ranging from JavaScript to advanced CSS to the LAMP stack. With 20,000 consistent views per month and articles open to the public, Lateral Code is a valuable reference for the community. Notable posts include Directory Trees with PHP and jQuery <<http://www.lateralcode.com/directory-trees-with-php-and-jquery/>>, Stunningly Simple CSS Minifier <<http://www.lateralcode.com/css-minifier/>>, and Custom WordPress Pagination System <<http://www.lateralcode.com/wordpress-pagination/>>.

Pigeon Carrier: Created Pigeon Carrier <<http://pigeoncarrier.com>>, a browser extension for Google Chrome and Firefox that adds attachment functionality to Twitter. As a project submission for Mozilla's first ever World Series of Hack, it won 3rd place in a field of 200 attendees and 50 projects. Employing the Dropbox API to store attachments and the Scribd API to preview them, Pigeon Carrier integrates an attachment interface directly into twitter.com, allowing users to send files to their followers with ease.

Freelance work: Avid freelance web developer. Designed and developed sites for various organizations with technologies ranging from the Google Maps API to WordPress to the HTML5 Boilerplate. Key work includes CompassPoint Mentorship <<http://karthikv.net/project/compasspoint-mentorship>>, Collegiate Climate Collaboration <<http://karthikv.net/project/climate-collaboration>>, and personal sites <<http://karthikv.net/project/valentin-spitsyn-portfolio>>. Portfolio of all work may be found at <<http://karthikv.net/>>.

Software Engineer – Maxim Integrated Products: Worked at Maxim Integrated Products as a software engineer during the summer. Developed C++ GUIs to support haptics. Wrote a WAVE file parser and waveform generator to streamline the creation and testing of touch feedback.

Lateral Slider jQuery Plugin: Authored Lateral Slider, a jQuery slideshow plugin that displays images in style. Transitions involve complex, eye-pleasing effects by applying a transformation to multiple slices of an image with varying duration times. Over 100 copies sold at Code Canyon <<http://codecanyon.net/item/lateral-slider-jquery-plugin-with-13-transitions/109908>>.

E: karthik.ksv@gmail.com, W: <http://karthikv.net>

Open Source Contributions:

PHP Query Lite: Developed PHP Query Lite (PQLite) <<http://pqlite.com>>, a small-footprint PHP library to traverse HTML documents. Paralleling the jQuery JavaScript library in some of its core functions, PQLite aims to bring the power of DOM traversal to the server side, allowing easy access to different portions of a web page, effectively handling parsing even when documents are malformed.

Silent Boss: Wrote Silent Boss, an MVC PHP framework <<https://github.com/karthikv/silent-boss>> equipped with extensive form and validation helpers along with an abstracted database class. Among other features, it also takes care of URL routing and sessions, ultimately aiming to streamline the creation of PHP-based websites through a solid starting ground.

Twitter's CSS Bootstrap Framework: Contributed to Twitter's CSS bootstrap framework, mostly in the area of selector optimizations. Prior to these improvements, the framework overused the costly CSS descendant selector and therefore lacked in terms of efficiency. After the changes, as an added bonus to the speed increase, close to 1 KB of the file size (~2%) was trimmed. See the Github pull request <<https://github.com/twitter/bootstrap/pull/114>> for more details.

Publications:

Do-It-Yourself WordPress Scheduling: Mastering WP-Cron: Publication for Envato's Wptuts+. Comprehensive guide to WP-Cron, a PHP-based scheduler built into WordPress. Explains why both cron and imprecise timing are present in WordPress' system and what benefits emerge from their marriage. <<http://wp.tutsplus.com/tutorials/theme-development/do-it-yourself-wordpress-scheduling-mastering-wp-cron/>>.

Crucial Concepts Behind Advanced Regular Expressions: Written for Smashing Magazine, a well-known web design and development blog. Uncovers in-depth regular expressions and helps people understand their myriad applications. Article obtained 800 up votes on Digg, nearly making the front page. <<http://coding.smashingmagazine.com/2009/05/06/introduction-to-advanced-regular-expressions/>>

Understanding Hooks From the Inside Out <<http://karthikv.net/publication/understanding-hooks>>

How to Create Your Own Stats Program <<http://karthikv.net/publication/stats-program>>

List of publications, along with information about them, may be found at <<http://karthikv.net/publications>>.

Awards and accomplishments:

USACO Gold Division: Qualified to gold division in the USA Computing Olympiad (USACO), a national algorithmic programming competition. Ranked in the top 30 of the nation's best algorithmic developers.

FIRST Robotics: Vice-president of team 846 in the FIRST Robotics competition. Software team leader in the 2010-2011 season. Received Rockwell Innovation in Control Award 2009 and the BAE Design Award 2010.

Botball: Mentor of the Oak Grove High School Botball team. Programmed and built the lego robots. Received best design award at the regional level and most reliable lego robot award at the national competition.

Introduction to Computer Programming: Java Academic Award

2nd Place at Gunn Invitational Programming Competition 2010