**Matthew Morrone**

[matthewmorrone.com](http://matthewmorrone.com) ☐ [matthewmorrone1@gmail.com](mailto:matthewmorrone1@gmail.com?subject=)

**Skills**

☐ Languages Java, C, PHP, Javascript, Node, Python

☐ Database MySQL, MongoDB (NoSQL), PostgreSQL, Oracle, SQLite (HTML5)

☐ Technologies HTML5, CSS3, Canvas, SVG, XML, XPath, XSLT, DOM, AJAX, JSON

☐ Libraries jQuery, jQuery UI, jQuery Mobile, Underscore, Coffeescript, Stylus

☐ Frameworks CakePHP, Angular, Backbone, Express, Django (MVC), Oracle/JDBC

☐ Development Git, SVN, XAMPP, MAMP, Eclipse, Aptana

☐ General Shell Scripting/Bash, Photoshop, Microsoft Office, Web Management/Hosting

**Work Experience**

[**8-Bit Evolution**](http://8bitevolution.com/)**, Pittsburgh, PA**

*Contractor*, March 2014

* Create a client-side MVC web application using AngularJS, UnderscoreJS, jQuery and AJAX.

☐ Allow consumers to easily select the attributes of an item to buy or sell, and filters results in real-time.

[**The Affective Computing Company**](http://www.taccpgh.com)**, Pittsburgh, PA**

*Software Engineer, Database Administrator*, April 2012 – October 2013

☐ Build a content management system with CakePHP for use by company employees and customers.

☐ Plan out and implement schema in MySQL, test and optimize to ensure efficiency and data integrity.

☐ Construct email/text messaging system with PHP/Cron to send messages at specified times.

☐ Design a mobile version of the site for taking surveys with jQuery Mobile and Twitter Bootstrap.

☐ Create a dashboard to visualize relevant data in table and graph form using HTML5 canvas.

☐ Implement secure password hashing (SHA1, SHA3), access control list, login/session functionality.

[**Learning Research and Development Center**](http://www.lrdc.pitt.edu)**, University of Pittsburgh**

*Undergraduate Research Position*, Perfetti Lab, August 2011 – April 2013

☐ Redesign online survey: convert XML to JSON and HTML, file generation/parsing, secure front end.

☐ Design web application in PHP, MySQL and Javascript -- allows researchers to upload and download files in various formats (CSV, XML, SQL, etc.) into a MySQL database. Front-end GUI similar to a spreadsheet. Uses AJAX to automatically update server database. Implements data mining tools and graph visualization.

☐ Design surveys and web applications with HTML, CSS, jQuery and PHP to the specification of graduate students conducting research online.

☐ Conduct research that examines the neurophysiology of cross-language and bilingual language processing.

☐ Parse results from fMRI and ERP/EEG. Use Excel, Matlab, SPSS, Mechanical Turk.

**Projects**

☐ [JQMyAdmin](http://www.matthewmorrone.com/spreadsheet) -- front-end port of PHPMyAdmin, resembles spreadsheet/Google Drive, usable offline

☐ [IPA Chart](http://www.matthewmorrone.com/ipa-chart) -- useful tool for linguists and linguistics students

☐ [Morse Code](http://www.matthewmorrone.com/morse-code) -- helpful tool for learning morse code

**Education**

University of Pittsburgh – Pittsburgh, PA Graduated April 2014

Bachelor of Science, Department of Computer Science Bachelor of Arts, Department of Linguistics

Data Structures, Algorithm Implementation, Database Management, Applied Cryptography, Machine Learning