

# Matthew Morrone

[matthewmorrone.com](http://matthewmorrone.com) □ [matthewmorrone1@gmail.com](mailto:matthewmorrone1@gmail.com)

---

## 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, 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, 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, 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](#) -- front-end port of PHPMyAdmin, resembles spreadsheet/Google Drive, usable offline
- [IPA Chart](#) -- useful tool for linguists and linguistics students
- [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	