

Joe McCullough - Programmer

Contact

Joe McCullough

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Current location: Austin, TX

Github profile: [JoeQuery](#)

Skills and Projects

Python

- [JSONSelector](#) - A utility which describes how to traverse to a particular value in a JSON response
- [MiddleMan](#) - Dynamic HTML templating system that directly interacts with JSON APIs responses. ([View on github](#))
- [Python built-in function reference](#) - Explanations and examples of built in Python functions
- [joequery.me](#) - My personal website, a custom Flask blog engine.

JavaScript/jQuery

- [Stupid Table Plugin](#) - A stupidly simple jQuery table sorting plugin
- [Challonge Text Alerts](#) - A Chrome extension which modifies the UI of the tournament bracket web application [Challonge](#) to support sending text messages to competitors. ([View demo](#)).

Ubuntu server configuration

- [Rails Template](#) - Rails template with extensive nginx documentation
- [Guide to installing Arduino on Ubuntu Virtualbox Guest under Windows Host](#)

Ruby

- [mrbc playground](#) - An environment to quickly convert ruby to object code.
- [Stagger](#) - Backup multiple MySQL databases at staggered times to ease server load
- [Route53-To-S3](#) - Backup Route53 DNS Records from AWS to S3

Technical writing / Tutorial creation

- [An absurdly extensive AWS setup guide](#)
- [Beginner's Introduction to Pointers in C](#)
- [Introduction to Recursion](#)
- [Converting a simple website to Python Flask](#)

Open source contributions

- Refactored and extended the parser of a Jinja2 syntax highlighting plugin - [PR Link](#)
- Added installation documentation for Habitbot setup - [PR Link](#)
- Altered the client Terminal broadcasting service ScreenxTV to hide user credentials input through the terminal - [PR Link](#)
- Fixed an issue in mruby's mirb REPL where the strings "exit" and "quit" would terminate the REPL when intended to be used as strings - [PR Link](#)

Employment

[Austin Coding Academy](#) - Instructor (June 2014 - November 2015)

- Corporate training
 - Introduction to Ruby for AMD engineers
- Tutoring and mentoring for students learning Python/PHP/JavaScript
- Developer community outreach
 - [Git crash course lecture](#)
 - [Thinking recursively](#) talk at Women Who Code meetup
 - Answering programming questions on Reddit [/u/AustinCodingAcademy](#)
- Content creation
 - [Recursion fundamentals - insertion sort](#)
 - [What is JSON?](#)

Andrew Harper - Python Developer (Contracting May 2015 - September 2015)

- Integrated a BackboneJS front end with a Django Rest Framework API
- Doubled the speed of a pre-existing in-house search indexer through Django ORM optimizations
- Created user favorites for arbitrary objects via Generic Foreign Keys
- Implemented a flexible data submission/review cycle between Andrew Harper employees and hotel representatives

Andrew Harper - Python Developer (June 2013 - June 2014)

- Rest API development via Django Rest Framework
 - Overrode Django Rest Framework internals to allow for more dynamic routing
 - Created authorization scheme which enforced limitations on API clients (with an emphasis on securing user data)
- Custom shopping cart
 - Stripe integration
 - Authorization to various parts of the site based on product selection
 - Created infrastructure for promo-codes, bundled products, US vs International pricing
- Dynamic GeoJSON generation for use with the MapBox API
 - [View the map](#)
- Created custom python APIs to cope with vendors unable to expose json/xml endpoints
 - [Requests](#) was used to facilitate interaction with the vendors' web applications
 - [PyQuery](#) was used to parse the resulting HTML and extract relevant data.

Communications Corporation of America - PHP Developer (Dec 2011 - June 2013)

- Custom Drupal module development for 25+ TV station websites.
- Created custom PHP libraries for interacting with vendor web applications
- Created in-house utilities to aid collaboration workflow. These tools enabled us to
 - easily transfer databases between developer machines
 - quickly restore from on-site database backups
- AWS management
 - EC2 / ELB
 - RDS
 - S3 / Cloudfront
- Nginx/Apache webserver management and configuration

Vert Studios - Web Developer (Sep 2010 - 2012)

- Custom jQuery plugin development
- Simple website development via Wordpress, RefineryCMS
- Deployment, hosting, and version control management
- Traffic generation via technical articles

Education

University of Texas at Tyler
Major: Computer Science with Math minor (Did not graduate)
3900 University Boulevard
Tyler, TX 75701-6699
(903) 566-7000
Attended: 2010-2013

Associates in General Studies

Tyler Junior College
1327 South Baxter Avenue
Tyler, Texas 75701
(903) 510-2200
Graduation Date: 2010

References

Available upon request.