Caleb Madrigal

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- http://calebmadrigal.com
- https://github.com/calebmadrigal
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Skills

- Strong communicator (speaker and writer)
- Agile/Scrum practitioner
- Languages/Platforms:
    - Python (Django, Flask, NumPy, SciPy, IPython Notebook, Matplotlib, Gunicorn)
    - Javascript (AngularJS, Node.js, Express.js, Underscore.js, Lodash.js, Async.js, jQuery)
    - Objective-C (iOS, Cocoa)
    - C# .NET (ASP.NET, MVC4, NHibernate, Spring.NET)
    - Java EE (GWT, JSF, Spring, Hibernate)
    - C (gcc, sockets, linux, makefile)
- Databases:
    - MongoDB
    - MySQL
    - MS SQL
    - PostgreSQL
    - IBM DB2
    - Sqlite
- Version Control:
    - Git
    - SVN
- Other Tools:
    - Docker
    - Vagrant
    - VirtualBox
    - VMWare Fusion/Workstation
    - Visual Studio
    - IntelliJ
    - PyCharm
    - WebStorm
- Linux Server configuration: Nginx, Apache, Gunicorn, Supervisord, Upstart, iptables, sendmail, cron
- Strong working knowledge of Cryptography and Security

Experience

SpiderLogic

Software Consultant, *March 2011 - Present*

Client: Wisconsin Lawyers Mutual Insurance Company, 2013-2014

- *Technologies:* Node.js, Express.js, AngularJS, MongoDB, Java, SOAP, Oracle
- Lead a small team to create a web portal for a legacy enterprise Java policy administration system. This portal was implemented as a Single-page App backed by a RESTful API, which is backed by Node.js, Express.js, and MongoDB.

Client: Hewins Financial, 2013-2014

- *Technologies:* Java EE, Google Web Toolkit, MySQL, Linux, Python
- Created a web app which enables financial advisors to rapidly model their clients' financial outlook and walk them through various scenarios.
- Made an offline version by wrapping the server software in a VM, and wrote a protection layer around it with Python.

Client: MyHealthDirect, 2012-2013

- *Technologies:* C# .NET, ASP MVC4 .NET, Spring, NHibernate, MS SQL, Objective-C
- Wrote Medical scheduling web app
- Wrote Medical scheduling iPad app
- Wrote an ETL tool to transform client-provided data files into a format our DB could handle
- Helped maintain large enterprise API and web app

Client: Wipfli (Internal Development), 2012

- *Technologies:* Objective-C
- Wrote insurance risk analysis iPad app

Client: SoZo Group, Wipfli (Joint Venture), 2012

- *Technologies:* Javascript, HTML5, CSS3, Joomla CMS, PHP, Linux
- Created web informational portal to provide help to Chinese companies looking to move operations to the US
- Website: https://chinausportal.com/index.php/en/

Client: ScenarioNow, 2011-2012

- *Technologies:* Java EE, Google Web Toolkit, MySQL, Linux
- Wrote financial modeling software for financial advisors

Client: Church Mutual Insurance Company, 2011

- *Technologies:* Java EE, Spring, Hibernate, JSF, IBM DB2
- Wrote Java EE application to manage actuarial statistics for Insurance Rating Software

Astronautics Corporation of America

Software Engineer, *June 2008 - March 2011*

- Wrote software in the C programming language for the Airbus A400M Network Server System (NSS).
- Developed several APIs based on requirements which I gathered from multiple teams.
- Developed company-wide Python coding standard and gave training presentations on Python.
- Wrote a hardware emulator in Python for use in our labs.
- Wrote Software design documents which used UML diagrams to communicate software module design

and interactions.
- Authored the Software Requirements Document for one of the components for the NSS in IBM Rational Doors (requirements tracking software).
- Wrote Test Cases, Test Procedures, and Test Applications (in C and Python) to verify requirements.
- Followed DO-178B for process flow, requirements, testing, implementation, etc.

Hitcents

Software Engineer, *August 2006 - May 2008*

- Developing an Enterprise Resource Planning (ERP) system.
- Desktop front-end to ERP in C# .NET/XAML/WPF
- Integrated Microsoft Office with ERP system.
- Wrote socket-level communication system for both the server-side and front-end of ERP.
- Wrote web software for ERP system using Perl, Javascript, CSS, and HTML.
- Developed access control software that uses Radio Frequency Identification (RFID).
- Certified RFID specialist at Hitcents.

Teksouth

Programming Summer Intern, *May 2005 - August 2005*

- Wrote a program that controlled the magnetic front door lock, using MS Outlook calendar as a front end for scheduling.

Side Projects

Home Security System

- For fun and security, I built a home security and automation system
- Hardware: RaspberryPi, hacked remote controlled outlet set, hacked magnetic sensor
- Software: Python, Flask, jQuery Mobile

Other Side projects

- See http://calebmadrigal.com for more side projects.

Speaking

O'Reilly Open Source Convention (OSCON) 2013

Topic: Sound Analysis with the Fourier Transform and Python

- Presentation Notes

Milwaukee Barcamp 2011

Topic: Using Transparent HTTP Proxies for Live Web Traffic Manipulation

- Code used

Education

Bachlor's in Computer Science - Western Kentucky University

- GPA: 3.80 on a 4.0 scale (Graduated May 2008)
- ACM President of WKU local chapter (2007-2008)
- Future Leader Award in Computer Science (2008)
- President's Scholar at WKU (2007-2008)