Jon Mason

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What I want to do

Work with a great team to make awesome programs.

Where I went to school

University of Chicago, B.A. Math and Physics 2007

Things I know how to do, and how well I know them

HTML5 Docker DevOps Haskell High Availability Python C Linux
Math Java React Scala Postgresql C++ Machine Learning CSS3
MongoDb Ruby SQL jQuery Ruby on Rails Android Security
Javascript

Things I've done

Platform Developer   **April 2013 - August 2016**
Conjur Inc
Helped build powerful enterprise security tools, focused on authorization and access control for both humans and machines.

- Developed highly available web services used by companies including Netflix to secure infrastructure.
- Used Postgresql to provide high performance for complex queries.
- Designed and built a complex microservice architechture to provide a rich feature set around a simple core.
- Maintained high security standards without compromising useability.
- Built high performance integrations with LDAP and Active Directory.

Junior Programmer   **November 2007 - June 2009**
University of Chicago
I worked for Academic Technologies providing programming services for faculty and staff. I was able to learn new languages and frameworks quickly to adapt as the position demanded. Here are some of the cooler things I made.

- Genetics learning tools to automatically generate problems in computational genetics and provide smart feedback on answers. This included some serious math and a very tricky image generation task,as well as learning how to integrate with J2EE technologies.
- A virtual microscopy lab for medical students. This is a Rails app with a big dose of Flash that helps med students learn about pathology without having to touch gross samples. The site is still up at vmicro.uchicago.edu.
- A system to help the library manage A.V. equipment. This was a rather large Adobe Flex user interface that served as a front end for a JAX-WS web service. This project taught me a lot about user interface design, as well as how to work with backend developers to integrate components of a large system.

Machine Learning Developer   **January 2011 - October 2011**
Praxeon Inc

This started as a small contract to create software to extract titles from PDF documents. The result was so succesful that I was asked to stay on and apply machine learning techniques to a variety of problems related to managing large numbers of medical and scientific papers, patents, and reports. In addition to learning a lot about cutting edge machine learning techniques, I learned more than I ever wanted to know about text extraction from PDF documents.

- Brought title extraction from a measly 75% using heuristic methods up to the high 90s using a combination of artificial neural networks and sequence tagging methods.
- Wrote code to classify documents on several levels, using techniques including support vector machines and boosting decision tree classifiers.
- Wrapped the machine learning code in a RESTful web service that provided automatic management of collections of documents, labels for documents, and trained machine learning models.

Tech Lead   **November 2011 - April 2012**
Oxford Technology Ventures

Developed a mobile dating app using cutting edge technologies. Minidates.com was a mobile dating service that offered a number of new features and paradigms. As tech lead, I oversaw the coding side of the venture, using new technologies like web mobile, asynchronous io and nosql databases to help build a complex platform on a tight schedule.

- Created a full stack mobile application, using Python and Tornado for the server, MongoDb for persitence, CoffeeScript, Backbone and jQuery on the client, integration with telophone and sms via Twilio, and native mobile features with PhoneGap.
- Developed algorithms to support real time schedule matching and push message notifications on a million user scale using minimal server resources.
- Managed a team of developers, designers and testers to deliver a complex application on schedule.

Independent Contractor   **October 2010 - Present**
Self Employed

I've worked on a variety of smaller projects over the years. Here are some of the cooler ones.

- Statistical analysis of performance testing data to automatically spot builds that resulted in deteriorating performance.

- Bar code scanner in ActionScript with noise tolerance sufficient to work with web cameras.
- Magento plugins to manage specialized inventory and integrate with legacy point of sale software.
- Time tracking client for use with open source project management systems.
- Python extension for high performance poker odds calculations.
- Heads up display for internet poker clients using DLL injection to interact with the host process.

This resume is open source: github.com/jjmason/resume