William Lamond

Present Location
Cambridge, MA

Contact Information
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Education   B.S. in Computer Science, University of Maine, Orono, ME 04473. May 2012

Github account   http://www.github.com/wlamond

Experience

Data Scientist, Wayfair, Boston, MA. October 2013 - Present
- Use Python, Hadoop, SQL Server, HP Vertica, PHP, Bash.
- Designed and built the search engine used on our flash sale site, Joss & Main.
- Developed 'customers also bought' recommendations using a conditional probability approach over hundreds of terabytes of data.
- Designed and built a system for computing product ranks using tens of terabytes of click stream data.
- Mined tens of terabytes click stream data for use in a logistic regression query classifier. Also provided architecture guidance on implementation of the classifier itself.

Junior Software Developer, Seniorlink Elder Care, Boston, MA. July 2012 - October 2013
- Used Java, PHP, SQL, Python, and JavaScript.
- Improved the performance of several application-critical queries by a factor of 10 by analyzing query plans, adding appropriate indexes, and rewriting the queries as needed.
- Designed and wrote a Web crawler in Python to gather data on 20 thousand medications from the National Institute of Health's Web site.
- Designed and developed a RESTful Web service in Java that provides an interface to a SOAP service and is consumed by an Android app.
- Designed and built a caching system that allows the aforementioned SOAP service to be avoided 95% of the time, improving response speeds by a factor of 10.

Projects

- Contributed to the machine learning library *scikit-learn*. Fixed bugs where estimators reported incorrect probabilities in the binary case, and where the *shuffle* utility function was unable to shuffle input with greater than 2 dimensions.

- Developed a logistic regression sentiment classifier. I used the 'Rotten Tomatoes' movie review data set, and achieved 62% accuracy in the multi-class case.

- Wrote an artificial neural network in Octave that classifies handwritten digits. It was trained and tested using the MNIST data set, and achieved 96% prediction accuracy on previously unseen samples.

- Designed and developed a database schema and domain specific query language for tracking Internet worm model data. Deployed on PostgreSQL and interfaced through a Java interpreter written with CUP and JFlex.

Computer Skills

Languages (proficient):	Python, PHP, SQL, Java, JavaScript
Languages (familiar):	C, Lisp, Objective-C, Octave
Other:	Linux, Hadoop, Solr, PostgreSQL, MSSQL, Git, SVN, Tomcat, Eclipse, LaTeX Windows