Uzval S Dontiboyina

Email: uzval@seas.upenn.edu, 210 S Melville, Philadelphia, PA-19139, Phone: 215-554-5877

Education

University of Pennsylvania, Philadelphia, Aug 2016 - May 2018
Master of Science in Computer & Information Science (Embedded systems). GPA: 3.4

Birla Institute of Technology, Mesra, June 2010 - May 2014
Bachelor of Engineering in Computer Science, Electronics & Communication. GPA: 3.7

Technical Skills

Programming Languages: C,C++, Java, Machine Learning algorithms, SQL, PLSQL, Unix, XML.
Frameworks: Apache Tomcat, Apache Storm, Map-reduce, Hadoop.
Other skills: Rest API, OBIEE, Microsoft Office, JUnit testing, Jira, Agile.

Work Experience

Research Assistant, University of Pennsylvania, Jan 2017 - Present

Developing a dynamic machine learning model that would predict the company's and corporate bond's performance based on disclosure dynamics and investor learning using R and C++.

Software Engineer, Verizon, Jun 2014 - Aug 2016

- Developed web portals, backend procedures which were used to build dashboards that would reflect network related information (for External Customers), SLA deviations, CRM reports, case management data (for internal Customers) using Oracle 11g, Oracle web logic server, BI, Java and OBIEE.
- Received **Recognition Award 2015** at Verizon for decreasing a portal's request response time by 37% which was achieved by redesigning the portal by leveraging the backend's computational ability.
- Published two research papers in IEEE's International Conference on Computational Intelligence & Communication Technology, 2016.

Major Projects

Real time Stream Processing: Built a distributed framework which emulates Apache Storm with a MapReduce-style architecture. This distributed framework uses spouts and bolts to replicate MapReduce functionalities and process real time data in form of urls which are retrieved from the web crawler.

Web Crawler: Developed a multi threaded topic specific web crawler in Java. This crawler uses Apache Storm Framework, and is similar to mercator crawler. It traverses the web by respecting the host server's robot.txt and uses Berkeley Database, to hold retrieved HTML/XML documents and channel definitions.

HTTP Web Server: Designed a multi threaded HTTP web server in Java. This server is similar to Tomcat server and follows RFC 2616, supports 1,00,000 concurrent requests and is capable of handling static as well as dynamic web contents using blocking queue, servlet container and sax parser.

Twitter Sentiment Analysis: Achieved 80.64% accuracy for mood prediction by ensembling the models, PCA with SVM on image data and PCA with logitboost (Logistic regression and Adaboost) on text.

Brain Computer Interfacing based Locking system: Designed a prototype that predicts user choice using ICA for features extraction and sine curve fitting on received EEG (Brain) signals for prediction.

Penn-OS: Developed a User-level UNIX-like Operating System which was achieved by developing a multi level priority scheduler, flat file system, and user shell. This OS runs as a guest operating system.

Penn-Shell: Developed a full-feature shell in C that can maintain foreground and background processes, standard input/output file redirection, multi stage pipelines, and also job control.