HARSH R. HARWANI

http://www.acsu.buffalo.edu/~hharwani/

in : **http://lnkd.in/b7g297y**   ✉: **hharwani@buffalo.edu**

⌗ : **https://github.com/HarshHarwani**   📞 : **(**716)-697-6596

EDUCATIONAL QUALIFICATIONS

Master of Science, Computer Science   **GPA: 3.52/4.0**

University at Buffalo, The State University of New York   **Expected: Feb 2016**

Bachelor of Engineering, Information Technology   **DISTINCTION**

Gujarat Technological University, India   **JUNE 2012**

Relevant Coursework

Information Retrieval, Programming Languages, Analysis of Algorithms, Software Engineering, Object Oriented Programming.

TECHNICAL SKILLS

Programming Languages: Java, JavaScript, knowledge of C, C++ and Python **Databases**: SQL Server, Oracle, And MySQL.
Operating Systems: Windows, Linux   **Web Technologies**: HTML, XML, JavaScript, JSON, CSS,SOAP
Tools and Framework: Map/Reduce, Hadoop, Apache Solr, Lucene, Eclipse, Git, Facebook Graph API, Struts, Web Services.

WORK EXPERIENCE

Tata Consultancy Services, Ahmedabad, India   **Dec 2012-Jul 2014**
Assistant Systems Engineer
Value Added Tax Application (J2EE, JavaScript, Struts, BC4J, Oracle, Jasper Reports)
- Collaborated across multiple teams through the entire lifecycle to develop various modules using J2EE, JSP, Servlets, Struts, Oracle, BC4J, and JSTL.
- Developed various modules for a Value Added Tax collection application of a state government.
- Designed and programmed an FIFO (First in First Out) approach for the task approval flow which reduced corruption and also reduced the task approval time by about 10-12%.

Hospital Management System (C++, Oracle)
- Designed and Developed a Hospital Management System using C++ in the front end and Oracle as the backend as a part of TCS's Initial Learning Program.
- Received appreciation for the attention to details and good leadership qualities.

ACADEMIC PROJECTS

News Search Engine (J2EE)   **Aug 2014-Oct 2014**
- Implemented a News Indexer which contained Parsing, Tokenizing, Filtering and Indexing of about 12000 news articles.
- Developed a query parser that can parse free text queries into structured query terms.
- Programmed two popular scoring mechanisms (TF-IDF and Okapi BM25) to rank retrieved documents.

News Personalization (J2EE, JSP, MySQL, Apache Solr, Apache Lucene, Facebook Graph API)   **Nov 2014-Dec 2014**
- Developing a news personalization system which captures user behavior and preferences to serve news stories.
- Using Apache Solr to index about 32000 news articles and Facebook Graph API to capture user preferences.
- Implemented Collaborative Filtering using Weka tool to provide recommended stories to users.

Simple Amazon Dynamo - Replicated Key Value Storage (Android, Java, Multithreading)   **Jan 2015-Feb 2015**
- Designed and implemented a simplified version of Amazon Dynamo.
- Implemented Quorum replication with replication degree 3 and versioned all objects to differentiate between stale copies.
- Incorporated a functionality for handling node failures and ensured that when any node recovers/rejoins, it should be Updated with most recent copies.

Stock Volatility Analysis (Map/Reduce, Hadoop, Hive, Pig, Java)   **Feb 2015-Mar 2015**
- Developed a Map-Reduce application which was able to analyze large stock data sets and give the name of 10 stocks with highest and lowest volatility. Large data set consisted about 1 GB of data and about 40000 Files.
- Three Map-Reduce jobs were chained together and the performance was analyzed on various sizes of data sets and on different number of processors with different number of cores.
- Same task was done using pig and hive, approximately a 101% improvement in the execution time was observed.

INDEPENDENT PROJECTS

Snake Byte (Python, Pygame)   **June 2015-Ongoing**
- Developed a snake game in python, wrote algorithms for collision detection and generating obstacles.

Food Card System (J2EE, Servlets, JDBC, JSP, JavaScript)   **Oct 2012-Nov 2012**
- Implemented a Food Card System for Employees which facilitated them to buy food at offices and provide tax benefits.