

OBJECTIVE

Seeking a challenging position where I can contribute my skills & experience while continuing to learn and evolve.

EDUCATION**University at Buffalo, the State University of New York.****[Aug 2013-Dec 2014]**

- **Master of Science** (Computer Science)
- **Course Profile:** Algorithms, Information Retrieval, Machine Learning, Software Engineering, Project Management, Distributed Systems, Operating Systems, Multimedia Systems, Advanced Computer Systems, Mobile Sensing.

Maharshi Dayanand University (World Institute of Technology), India.**[May 2008-Jun 2012]**

- **Bachelor of Engineering** (Computer Science)
- Graduated with **First Division**.
- Chosen as "**Best All-Rounder**" for the Class of 2012.

PROFESSIONAL EXPERIENCE**University at Buffalo, the State University of New York.****[Oct 2013-Present]****Position: Student Technical Assistant.**

- Actively involved in providing IT assistance to students and faculty of the School of Dental Medicine, UB.

HCL Technologies, Noida, India.**[Aug 2012-Aug 2013]****Position: Engineering Trainee.**

- Provided IT Infrastructure support to Windows systems and internally developed applications.
- Acted as the first point of contact for the client.

CMC Ltd, New Delhi, India.**[Jun 2010-Aug 2010, Jun 2011-Aug 2011]****Position: Software Intern.**

- Contributed towards the development of an email engine, primarily using J2EE, HTML and CSS. Also contributed towards the creation of a Local Enterprise IM application using J2SE.

DEVELOPMENT PROJECTS**Quantified Self (Android Framework| Research Project)****[Aug 2014-Present]**

- Developing a personalized middleware that generates user centric behavioral data using phone sensors and external devices. The same is made available to user level apps through a separate API.
- Tools/Software Used: Android 4.4 Source, Eclipse, Linux, GIT, JDK.

Green Route (Android Sensing| Mobile App)**[Aug 2014-Present]**

- Developed an Android app that uses the phone's accelerometer to detect a person's driving efficiency. The app also uses an ODB Bluetooth device (if available) to gather finer fuel consumption readings.
- Tools/Software Used: Android SDK, Eclipse, Linux, GIT, JDK.

Mini Amazon Dynamo (Distributed Systems)**[Feb 2014-May 2014]**

- Implemented a simplified version of Amazon Dynamo: Amazon's highly available key-value store. Achieved scalability and availability by data partitioning and data replication using consistent hashing and node failure handling mechanism. Implemented this in a multithreaded fault tolerant Android ecosystem.
- Tools/Software Used: Java, Android SDK, Eclipse.

Multi Source Search Engine (Information Retrieval)**[Oct 2013-Dec 2013]**

- Developed a search engine with auto suggest and feedback that indexed multiple sources to fetch results related to the query as well as results from multiple sources.
- Tools/Software Used: Eclipse IDE, Apache SOLR, JDK, JSP, Servlets, Apache Tomcat, HTML, CSS.

Handwritten Numeric Digit Classifier (Machine Learning)**[Oct 2013-Dec 2013]**

- Implemented One-vs-All Multiclass Classification technique and achieved 96.34% and 95.56% correct predictions respectively using Logistic and Neural Network Classification. Tools/Software Used: MATLAB

Totally and causally ordered group messenger (Distributed Systems)**[Feb 2014-May 2014]**

- Created an Android application that achieved total and causal ordering in a group chat environment by combining a sequencer based algorithm for total ordering along with a vector clock based algorithm for causal ordering.
- Tools/Software Used: Android SDK, Eclipse.

Kernel Programming on OS-161 (Operating Systems)**[Feb 2014-May 2014]**

- Solved synchronization problems, designed and implemented data structures for process management and scheduling, implemented system calls and file system support for running user programs.
- Tools/Software Used: Eclipse C, OS-161, GNU Debugger.

Digital video, image coding and compression (Multimedia Systems)**[Feb 2014-May 2014]**

- Performed, analyzed and improved Linear Predictive Coding, JPEG Compression, and MPEG coding schemes.
- Tools/Software Used: MATLAB and its APIs.

LEADERSHIP AND MANAGERIAL SKILLS

- Organized the inter college festival "Fiesta Vistoso" **2011** as the "**Head Coordinator**".
- Managed technical events at the inter-college Festival "Fiesta Vistoso 2010" as the "**Technical Head Coordinator**".
- Volunteered to be the **Campus Ambassador** for **Starpreneur** (Nurture Talent Academy).
- Volunteered for the **XIX Common Wealth Games** Delhi 2010.

ACHIEVEMENTS

- **Awarded 1st Prize as a Debater** at the inter-college festival "Fiesta Vistoso" 2011.
- **Awarded 3rd & 2nd Prizes in the "Group Discussions"** at the inter-college festival "Fiesta Vistoso" 2010 and 2011 respectively.
- **Represented College** at various Debating events including debates at IIPM and Apeejay College of Engineering.
- Represented School in programming **events** at Quanta, CMS Lucknow. An inter-school festival with teams from all over India and various countries including **USA, Russia, UK, South Africa, etc.**

SKILLS & PROGRAMMING EXPERIENCE

- **C++, C, Java (J2SE, J2EE, Servlets, JSP, JDBC), HTML, CSS, Linux, Windows, Macintosh, Eclipse, Apache Solr, Lucene, Matlab, NetBeans, Android API, GIT, Classification, Regression, Machine Learning, Distributed Systems, Android Source (AOSP),** Event and error-driven programming, Software project management, Research interests in mobile sensing and the internet of things.