

## SUMMARY

---

Software Engineer, problem solver and an IT enthusiast looking to contribute towards the fast paced evolution of the software industry.

## SKILLS

---

- **Proficient:** Java, Android SDK, GIT, Elastic Search, Linux.
- **Intermediate:** Python, REST based web development, JUnit, Apache Solr, Lucene, HTML, CSS.
- **Introductory:** PHP, C++, C, Machine Learning, Software project management, JavaScript.

## PROFESSIONAL EXPERIENCE

---

**Google Inc, Mountain View.** [June 2015-Present]

**Position: Internal Technology Resident.**

- Contribute towards enhancing internal tools and technologies used by Googlers.
- Enhance and support internal tools and services developed and tweaked for internal use.
- Proposed and developed a badging and queuing mechanism for internal tech support, cafes and baristas.

**Nervve Technologies, Buffalo, New York.** [Feb 2015-June 2015]

**Position: Software Engineer.**

- Contributed towards the development and maturity of the company's video search platform.
- Implemented frame wise text search for the platform, using elastic search implemented over text recognized using optical character recognition.
- Acted as a full stack developer, developing the PHP backend and an Angular JS based front end.

**University at Buffalo, the State University of New York.** [Oct 2013-Feb 2015]

**Position: Student Technical Assistant.**

- Providing IT and infrastructure assistance to students and faculty of the School of Dental Medicine, UB.
- Enhanced the installation procedure of the most important application used by students and faculty through a script.
- Assisting in setting up a Mac deployment method that reduced the deployment time of student machines considerably.

**HCL Technologies, Noida, India.** [Aug 2012-Aug 2013]

**Position: Engineering Trainee.**

- Developed and supported legacy software products used by the client.
- Provided IT Infrastructure support to Windows systems and internally developed applications.

**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.

## EDUCATION

---

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

- Master of Science (Computer Science)
- Specialized in Mobile Systems

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

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

## DEVELOPMENT PROJECTS

---

**Seismic Record (Android Sensing| Mobile App)** [Feb 2015-Present]

- Developing a distributed, self leader voting, earthquake detection and warning application.
- Tools/Software Used: Android SDK, Android Studio, Linux, GIT, Java.

**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-Feb 2015]**

- 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.

### **BEAM-Messaging Engine (Internship Project)**

**[May 2011-Jul 2011]**

- Created an intra-network message transfer system that was to be used as a local email mechanism.
- Tools/Software Used: Eclipse, J2EE, Servlets, JSP, HTML, CSS.

## **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 **Starprenneur** (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 3<sup>rd</sup> & 2<sup>nd</sup> 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.**

## **INTERESTS**

---

- Research interests in mobile sensing and the Internet of Things.
- Biking, Running, Swimming, Following trends in technology.