**Srinivasan Rajappa**

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**EDUCATION**

**Master of Science**, Computer Science, (Feb 2016)

**University at Buffalo**, **State University of New York, Buffalo**, NY

Courses: Modern Networking Concepts, Computer Vision and Image Processing, Introduction to Machine Learning, Distributed Systems, Database Systems, Algorithms for Modern Computer Systems, Computer Architecture.

**Bachelor of Technology**, Computer Science and Engineering, [GPA: 7.3 /10] (May 2012)

**Jaypee University of Eng. and Tech,** Madhya Pradesh, India

**TECHNICAL SKILLS**

* **Languages:** Java, C/C++, Python, PL/SQL, MATLAB, Android application development, Verilog, VHDL, R, Elixir
* **Web & Other Technologies:** HTML, CSS, JSON, XML, TCP/IP, Python Django, PHP
* **Database Technologies & Frameworks:** Oracle Database 11i/12c
* **Tools & Operating Systems:** Eclipse, Oracle TOAD, Wireshark, CVS, Git, Windows 7/8, Linux (Fedora, Ubuntu)

**WORK EXPERIENCE**

**Software Engineer** at **Accenture Services Pvt. Ltd.**, Bangalore, INDIA (March 2013 - July 2014)

* Served the role for provisioning services for Wind telecom- Operation Support System (OSS).
* Handled database operations for provisioning and validation of network services in real time.
* Took initiative and conducted a web seminar, described the process of provisioning in telecom industry. This event was conducted live and was attended by 400 plus employees across the company.

**Software Engineer Intern** at **Zappos.com**, Buffalo, NY (September 2015 – Present)

* Working on migrating data for web application from Non-Relational database (MongoDB) to Relational (MySQL).
* Aiming to create APIs and Libraries for making applications robust so as to satisfy the business requirements.

**ACADEMIC PROJECTS [**GitHub - [**https://github.com/srajappa**](https://github.com/srajappa)]

**Remote File sharing Application** (Computer Networks)

* Created an application that helps user in an internetwork to discover new hosts, send/receive files and view network statistics.
* Implement a peer-peer system where a client would connect to a dedicated server and then perform actions like connect, download, upload etc. **[C]**

**Simulation of TCP Protocol** (Computer Networks)

* Simulated the Selective Repeat, Go-back-N (sliding window) and Alternate Bit TCP protocols.
* Performed tests over servers by sending packets and observed the throughput results. **[C]**

**Implemented Distance Vector Routing** (Computer Networks)

* Developed an application for Network Layer Routers to communicate with each other and create respective forwarding tables with least cost.
* The application simulated network crash, updated network cost between neighboring servers, displayed network router’s forwarding table etc. **[C]**

**Classification of Handwritten Numerals** (Machine Learning)

* Successfully implemented Machine learning Algorithm to classify handwritten numerals.
* Used Neural Networks and Logistic Regression to train the system.
* Achieved an error rate of 2.5 % and 3.0 % using Neural Networks and Logistic Regression respectively. **[MATLAB]**

**Semantic Labeling on images** (Computer Vision and Image Processing)

* Extracted features on images and performed classification on a dataset of images comprising of various scenes.
* Used Artificial Neural Networks algorithm to train the system to identify the features and corresponding semantic labels.
* Successfully provided semantic labeling to image data set with an accuracy rate of over 50 %. **[MATLAB]**

**Implementing SQL Query evaluator** (Database Systems)

* Application that provides results after parsing and evaluating the SQL queries viz. SELECT, PROJECT, JOIN, UNION etc.
* Created a setup to analyze queries and perform operations with respect to a reference relational algebra tree.
* Also worked on process to improve efficiency where in large set of data operations and join operations can be performed in memory constrained environment using algorithms like *external sort, Hash Join* etc.**[Java]**

**Simple Amazon Dynamo** (Distributed Systems)

* Developed an Amazon Dynamo style key vale storage in multithreaded environment.
* The system was implemented on Android Platform guaranteeing availability and partition tolerance. **[Android, Java, Multithreading]**

**Distributed Hash Table based on Chord** (Distributed Systems)

* Implemented a peer to peer distributed hash table, on android platform.
* The system adopted the Chord protocol providing ring based routing, node partitioning, dynamic node joining. **[Android, Java]**