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, Phoenix framework
- **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 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.
- Worked on an internal application "Grandcentral" that served as one stop resource locator for all the employees.

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.

ACADEMIC PROJECTS [GitHub - **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]**