BF2, NIRMAL DELUXE,
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RAHUL VENKATARAMAN

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EMPLOYMENT

Software Development Engineer — **Cisco Systems** — **August 2013 - Present**

Prime Infrastructure

- Implemented out-of-the-box feature templates for Intelligent Wide Area Network (IWAN).
- Implemented bulk import and export functionalities for Composite, Config-Group, MBC and IWAN templates in "Storm".
- Resolved defects in quick time. Brought down the defect count from above 100 to single digit in 1.5 months.

College Intern — **Cisco Systems** — **January 2013 – May 2013**

- Reduced the daily build flow time from 6 hours to 2 hours by identifying the independent tasks and parallelizing the entire flow. ***Tool***: Jenkins.
- Redesigned the search feature in Prime Infrastructure to support menu navigation and to include help content.

EDUCATION

Coimbatore — **PSG College Of Technology** — **Fall 2009 – May 2013**

- B.E in Computer Science and Engineering. GPA: 8.88.
- Undergraduate Coursework: Operating Systems; Databases; Algorithms; Programming Languages; Comp. Architecture; Theory of Computing; Compilers; Software Engineering.

Madurai — **TVS Lakshmi Higher Secondary School** — **Fall 2007 – May 2009**

- Completed Higher Secondary Degree. Marks: 1155/1200 (96.25%)

Madurai — **TVS Lakshmi Higher Secondary School** — **Fall 2006 – May 2007**

- Completed Matriculation Degree. Marks: 1017/1100 (92.45%)

TECHNICAL EXPERIENCE

Projects

- **An Intelligent Scoring System for Cardiac Arrest Prediction**: Traditional scoring systems used only the vital signs to predict the occurrence of Cardiac arrest. The outcome of such traditional systems was a binary score indicating either survival or death. These systems were severely limited due to their inability to predict morbidity and mortality and further, they did not take into account other important parameters which determine the risk of cardiac arrest. To address these, an intelligent scoring system is developed which takes both the vital signs and the Heart Rate Variability (HRV) into account to give a continuous risk score within the range of 0 to 100. An initial score is calculated and a Machine Learning algorithm is used to update this score which gives us the cardiac arrest risk within the next 72 hours.
- **Implementation Of Multi-Prefix Trie**: A New Data Structure For Designing Dynamic Router Tables: Prefix tries were used for implementing Routing tables and the Longest Prefix Matching algorithm was used for IP lookup to determine the output port for routing the incoming packet. The IP lookup operation is a major determinant of the router's performance. A new data structure called Multi-Prefix Trie is implemented in which all the nodes have routing information and so lookup, insertion and deletion of nodes is faster. This paves way for enhanced router performance and enables the routing table to behave dynamically.
- **Location Based Profile Change (An Android Application):** The user tags a place in the Google maps and associates a phone profile with the place. The movement of the user is then continuously tracked using the GPS of the phone and the profile of the phone is changed automatically when he is sufficiently near to the tagged place.

- **Movie Classifier:** Categorizes movies based on the ratings given by critics. Trained a KNN classifier to come up with the movie rating from a dataset which already had movies with ratings associated.
- **A Personalized Online News Recommendation System:** News articles coming under a various categories are extracted from various websites and presented to the end user at a single location. The ranking of the categories and the ranking of the news articles under each category are determined initially based on the user preference. The browsing pattern of the user is continuously tracked and the ranks of the categories and the articles are updated dynamically using a Machine Learning Algorithm so that the most popular news articles are displayed at the top of the page when the end user logs in every time. Published in **International Journal of Computer Applications.** http://www.ijcaonline.org/archives/volume57/number18/9212-3758

AREAS OF INTEREST

Artificial Intelligence and Machine Learning; Bio-Informatics;

COURSE-WORK PROJECTS

- Implemented a Two Pass Assembler in Systems Software course using C.
- Implemented Library Management System in Database Management Systems course.
- Implemented Bus Ticket Reservation System in Object Oriented Programming course using C++.

ADDITIONAL EXPERIENCE AND AWARDS

- **Cisco Connected Recognition Award**.
- **National level Semi-finalist** in **ICPC-ACM** contest.
- Cognizant Certified Student.
- Secured **centum** in Mathematics I Paper in X Standard Matriculation Examinations, 2007.
- Secured **centum** in Mathematics in Higher Secondary Examinations, 2009.
- Passed in 1st class with distinction in Junior Grade Typewriting (English – 30 words per minute).
- Got General Proficiency Prize for academic consistency for **8 consecutive years**.
- State level finalist in the Velammal Science and Technology Exam for 2 years.

EXTRACURRICULAR ACTIVITIES:

- Secretary of the **Computer Science Engineering Association**.
- Member of the **ACM**.
- Organized Paper Presentation in KRIYA 2011.
- Organized FROPESSOR event in KRUZADE 2010.
- Organized Algorithm-Design contest in KRUZADE 2012.
- Overall school champion in Lakshmi Trophy, a inter school quiz competition.
- Prizes in various quiz competitions.

LANGUAGES AND TECHNOLOGIES

- C++; C; Java; Python; JDBC; Spring; Dojo;SQL; Hibernate
- Visual Studio; Microsoft SQL Server; Eclipse; Net Beans IDE; Code Blocks IDE