# Rahul V

### Curriculum Vitae

### Objective

Looking for a position as a doctoral student to work on computational linguistics and machine learning.

#### Education

2011-2013 Master's degree in Computer Science, International Institute of Information Technology, Bangalore, India.

GPA: 3.6/4

Courses: Intelligent Systems, Multi agent systems, Mathematical models of computation Thesis: I completed a 6 month internship where I worked on knowledge discovery from Software Engineering ecosystem. Software development is viewed as a social activity where code, help and reports of bugs are shared between developers in various forms. This effort aims to use the online trail generated as a result of this process to help build interesting applications. Two specific problems solved as a result were:

- $\circ~$  Discovery of technical expertise from open source code repositories
- Building a semantic search for large source code repositories.

I developed a prototype to demonstrate the feasibility using data from Github and Stackoverflow.

Thesis Advisor: Dr. Srinivas Padmanabhuni, President of ACM India

2007-2011 Bachelor's degree in Information Science, Nitte Meenakshi Institute of Information Technology, Bangalore, India.

GPA: 9.1/10

Courses: Probability and Statistics, Algorithms, Data Structures, Distributed Systems.

**Project : Power Aware Distributed File System** Hadoop is one of the most popular means to implement a distributed file system and Map Reduce is the programming framework which runs on Hadoop. Hadoop (atleast back then) was optimized for performance but this leads to huge power wastage. We proposed a novel method to reduce the power consumption of a Hadoop cluster without violating the SLA constraints.

Project Advisor: Dr. Sanjay HA, HoD (ISE), PhD (IISc)

#### Professional Experience

July 2014 - General Electric, Edison Engineering Development Program.

Present Selected as a part of the prestigious 100 year old Edison program to nurture early career talent through a combination of course work and rotations across labs. Work in the Data Mining to help find useful information from text reports.

August 2013 Cisco, Software Engineer.

- July 2014 Worked on a mobile gateway platform in the NAT/Firewall team as a developer. Pride in seeing code affecting(in a positive way!) millions of customers.

#### Honours and Awards

- One of the 5 Infosys scholars in a batch of 120 students at IIIT-B.
- $\circ$  Won the data hackathon at the launch of the  $1^{st}$  Web Observatory held at IIIT-B in 2015
- Awarded the *Above and Beyond* award for being one of the core members in organizing TechMela, GE's technical extravaganza to showcase projects to outsiders.

### Projects

#### Marathon

#### July Fleet Level Analytics Gauge, GE Global Research, Bangalore, India.

- 2014-Present Identify the top issues affecting the GE power plant fleet from the service reports between field engineers and experts in GE.
  - Developed robust algorithms to process the noisy text (extensive use of abbreviations, incorrect grammar and domain specific words) and used information extraction techniques to extract parts, conditions and fixes.
  - The extraction information was used further downstream to develop statistical algorithms to develop an early warning system to identify top issues.

#### Fall 2012 CloudTop.

- Design of a distributed and scalable architecture for providing desktop-as-a-service inspired by cellular biology.
- o In cellular biology, cells can perform various roles with varying degrees of success. In the proposed methods, individual nodes can take up various roles independently without a central controller assigning roles.
- o Guide: Dr. Srinath Srininvasa. Report:

Course Projects - Sprint

#### Fall 2012 Concordance for the Mahabharatha.

- o Develop a word concordance for the Mahabharatha epic using the BORI edition as a part of the software engineering course.
- A short project with Dr. Shrisha Rao.

#### Power Aware File System for Hadoop clusters. 2010 - 2011

o Mechanism to reduce the power consumption of a heterogeneous Hadoop cluster by altering the placement of data chunks.

#### Publications

- [1] Rahul Venkataramani et al. "Discovery of technical expertise from open source code repositories". In: Proceedings of the 22nd international conference on World Wide Web companion. International World Wide Web Conferences Steering Committee. 2013, pp. 97–98.
- [2] Rahul Venkataramani et al. "Latent Co-development Analysis Based Semantic Search for Large Code Repositories". In: Software Maintenance (ICSM), 2013 29th IEEE International Conference on. 2013, pp. 372–375.

#### Skills

Development

Software NLP Development with Java and extensive use of Stanford CoreNLP, C programming.

Interests Information Theoretic treatment of NLP, elementary linguistics, very elementary cognitive psychology

## Interests and Hobbies

I watch football and cricket and am developing an interest in the academic analysis of the game. I am also accused by people to converge to philosophical debates when a conversation is sufficiently long. I have a soft corner for the softer Veena Stores idlis. I read to satiate my hunger.