# Sudha Rao

609-933-0409
raosudha@cs.umd.edu
9348 Cherry Hill Rd, Apt 117,
College Park, MD 20740

## Education

**University of Maryland, College Park**
*PhD - Computer Science; GPA: 3.85/4.0* *2013 - 2018 (expected)*
*Focus: Natural Language Processing*
*Advisors: Hal Daumé III, Philip Resnik*

**Veermata Jijabai Technological Institute** Mumbai
*Bachelor of Technology - Computer Engineering; CPI:9.4/10* *May 2011*

## Publications

- **Sudha Rao**, Yogarshi Vyas, Hal Daumé III, and Philip Resnik. **Parser for Abstract Meaning Representation using Learning to Search** *arXiv:1510.07586*
- **Sudha Rao**, Allyson Ettinger, Hal Daumé III, and Philip Resnik, **Dialogue focus tracking for zero pronoun resolution**, NAACL 2015, Denver, Colorado, June 2015.
- Suzanne DSilva, Neha Joshi, **Sudha Rao**, Sangeetha Venkatraman, and Seema Shrawne. **Improved Algorithms for Document Classification & Query-based Multi-Document Summarization**, *International Journal of Engineering and Technology vol. 3, no. 4, pp. 404-409 , 2011*

## Research Experience

- **Semantics for biology** *Summer 2015*
  - Worked on identifying protein interactions in biology texts using **Abstract Meaning Representation (AMR)** of sentences.
  - This work is part of DARPA project named ***Big Mechanism*** and is in collaboration with **Dr. Daniel Marcu** and **Dr. Kevin Knight** at **Information Science Institute, USC**.
- **Semantic Parsing** *Fall 2014*
  - Worked on automatically learning **Abstract Meaning Representation (AMR)** for English sentences using **SEARN** (Search based Structured Prediction) technique.
- **Machine Translation** *Spring 2013*
  - Worked on developing a **Sequence Labeling** model for restoring **dropped pronouns** when translating SMS text from Chinese to English.
  - This work was done as a part of **IBM's BOLT** project.

## Work Experience

- **NVIDIA Graphics Pvt. Ltd.** Pune
  *System Software Engineer* *July 2011 – April 2013*

- Designed and implemented a test infrastructure for Tegra Driver on varied mobile operating systems and platforms.
- Worked on in-house mobile tools being developed as a part of *Planning, Infrastructure & Operations* team.

- **Microsoft India Development Center** Hyderabad
  *Software Development Engineer - Intern* *May 2010 – July 2010*
  - Worked on Data Protection Management.

## Teaching Experience

**CMSC 131 - Object Oriented Programming** Fall 2013

## Projects

- **Predicting clinical depression** *Spring 2013*
  - We used **Facebook status updates** to predict neuroticism among people.
  - This project was done as a part of the **Computational Linguistics** course.
- **Farmers Buddy** *Fall 2009*
  - We developed a first of its kind portal to be accessible via Internet allowing users, especially farmers, to obtain information regarding various activities involved in farming and providing a platform for interaction between the different users of the system.
  - This project was developed as part of **IBM's The Great Mind Challenge**, 2009, and was among the **Top 20** projects all over India.

## Honours/Awards

- Scholarship to attend the **Grace Hopper Celebration** conference 2014 and 2015.
- Recipient of **Dean's Fellowship** at University of Maryland, College Park.
- Travel fund to attend **NIPS** conference 2013.
- Scholarship to attend the **Women in Theory** conference 2012 at Princeton University.
- Ranked **3rd** out of 70 students in the Computer Science department of VJTI.
- Recipient of scholarship award from **Sir Ratan Tata** Trust (2008, 2009 and 2010).
- **56th** rank in Maharashtra in MHT-CET examination held in May 2007 in Engineering Course. Score: **(194 / 200)**

## Technical Skills

- **Languages:** Python, MATLAB, Java, C++, C#, SQL, Perl
- **Web Technologies:** J2EE(JSP, Servlet), HTML, CSS, Javascript, AJAX
- **Databases:** Microsoft SQL, IBM DB2
- **Operating Systems:** Linux, OS X, Microsoft Windows

## Relevant coursework

- **Graduate**: Computational Linguistics 1 & 2, Multi-lingual Natural Language Processing, Prediction: Brain vs Machines, Analysis of Algorithms.
- **Undergraduate**: Advanced Algorithms, Approximation algorithms, Intelligent systems.