# Sachin Agarwal

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## Education

# Masters in Language Technologies (2nd year), 2006 - Present

Language Technologies Institute, School of Computer Science Carnegie Mellon University

#### B.Tech. in Information Technology, 2002 – 2006

Indian Institute of Information Technology (IIIT), Allahabad, India

GPA: 3.84/4.0 (University Silver Medalist)

#### The Indian School Certificate Examination (ISC), Year 12, 2001

Saharanpur Public School, Saharanpur, India

Percentage Marks: 92% (Math. 99%, Comp. Sc. 97%, Physics 98%) (Overall rank 1 in district

Saharanpur, UP, India)

#### The Indian Certificate of Secondary Education (ICSE), Year 10, 1999

Saharanpur Public School, Saharanpur, India

Percentage Marks: 90% (Overall rank 1 in district Saharanpur, UP, India)

#### Research Interests

Information Retrieval, Machine Learning, Natural Language Processing

# Research Work and Experience

#### **Carnegie Mellon University**

RADAR: Responsible for maintaining the adaptive Logistic Regression classifiers used in RADAR project.

Boeing's F/A-18 Automatic Maintenance Environment.

The details of above projects are available at <a href="http://nyc.lti.cs.cmu.edu/clair/projects.htm">http://nyc.lti.cs.cmu.edu/clair/projects.htm</a>

Supervised and semi/un-supervised techniques in interactive Active Learning for Named Entity Recognition task.

#### Indian Institute of Information Technology - Allahabad

*Undergrad Thesis*: Saransh - Text Summarizer for Hindi Documents.

InfoQuest – User adaptive Meta search engine.

Carnival – A Complete Solution to Movie on Demand System.

Question Answering System for Hindi Language.

Research Assistant and Developer for Project modules in Universal Digital Library project which is taken as an initiative by a group of institutions which are: Carnegie Mellon University (USA), Indian Institute of Science (Bangalore) CDAC Noida and CDAC Kolkata (India), IIIT Hyderabad

(India), IIIT Allahabad (India). Funded by Ministry of Communication and Information Technology, Government of India.

Study of Remote Access Servers (RAS) at UTStarCom Inc., as a Trainee for my summer internship programme (June – July 2004).

## **Publications**

- Sameer Badaskar, Sachin Agarwal, Shilpa Arora, "Identifying Real or Fake Articles: Towards better Language Modeling", To appear in the proceedings of The Third International Joint Conference on Natural Language Processing (IJCNLP 2008), Hyderabad, India.
- Shilpa Arora, Sachin Agarwal, "Literature Review on Active Learning for NLP", December 2007.
- Sachin Agarwal, Shilpa Arora, "Context Based Word Prediction for Texting Language", 8th RIAO Conference on Large Scale Semantic Access to Content (Text, Image, Video and Sound), Pittsburgh, USA, May 2007.
- Sachin Agarwal, Manaj Srivastava, Pallavi Agarwal, Ratna Sanyal, "Anaphora Resolution in Hindi Documents", IEEE International Conference on Natural Language Processing and Knowledge Engineering (IEEE NLP-KE), Beijing, China, August 2007. (From the work done in undergrad)
- Sachin Agarwal, Pallavi Agarwal. "A Fuzzy Logic approach to Search Results' Personalization by tracking user's web navigation pattern and psychology", IEEE International Conference on Tools with Artificial Intelligence (ICTAI) 2005, Hong Kong, China, November- 2005, pp. 318-325.
- Sachin Agarwal, Pallavi Agarwal. "InfoQuest A Meta Search Engine for user friendly intelligent information retrieval from the web", IEEE International Conference on Natural Language Processing and Knowledge Engineering (IEEE NLP-KE), Wuhan, China, November -2005.
- Sachin Agarwal, Raman Mittal, Sudip Sanyal, Aayush Deep Garg. "Carnival A low cost solution to Interactive Movie on Demand System", International Conference on Computational Intelligence for Modeling, Control and Automation (CIMCA), Vienna, Austria, November 2005.
- Sachin Agarwal, Pallavi Agarwal. "A pragmatic solution to an Indian accented English speech synthesizer using Residual Excited Linear Predictive coded voice, India International Conference on Artificial Intelligence (IICAI)-2005, Pune, India, December 2005.

### Relevant Coursework

#### **Graduate Level**

Machine Learning (PhD level) Algorithms for NLP Information Retrieval Language and Statistics 1 Software Engg. For Information Systems Language and Statistics 2 Analysis of Social Media

#### **Undergraduate Level**

Natural Language Processing Image Processing Artificial Intelligence Design and Analysis of Algorithms Neuro-Fuzzy Computing Data and File Structures Operating Systems Computer Networks

#### **Skills**

Programming and Scripting Languages: C, C++, Perl, VB, PHP scripting, Prolog, JAVA, Bash Shell Scripting

Software and Utilities: MATLAB, Microsoft Office, LEX, YACC, and other general software. Platforms: Microsoft Windows, DOS, Linux (RedHat, Fedora Core 3,4, SuSE 7,8,9), MINIX

#### Honors and Awards

- Graduate Research Assistant, Language Technologies Institute, Carnegie Mellon University (Fall 2006 Present)
- Awarded scholarship by IIIT-Allahabad four times consecutively for outstanding academic performance in sessions 2002-2003, 2003-2004 and 2004-2005, 2005-2006.
- Awarded national level prize by the Council of Science and Technology (U.P.) on achieving highest marks in Mathematics in ISC 2001 board examinations.
- Selected among the top 2% (out of 125000) candidates in IIT Entrance Examinations, 2002.
- Ranked 1 in district Saharanpur (U.P.) in class X (ISCE 1999) and also in class XII (ISC 2001) Board examinations.
- Certificate of appreciation for being one of the organizers of the Workshop on Optical character Recognition with workflow and Document Summarization (OCR & DS, 2005) under Universal Digital Library Project, 19 20 March, 2005.

#### Extra Curricular Activities and Hobbies

Elected Vice-President of Indian Graduate Students Association (IGSA), CMU, December 2007 - present

Executive Committee Board Member of Indian Graduate Students Association (IGSA), CMU, November 2006 – November 2007.

Received Karate training till 5th Kyu (The Green) from "Academy of International Martial Arts". One of the organizers of Effervescence – 2004, the annual cultural festival of Indian Institute of Information Technology, Allahabad.

Hobbies include playing Badminton and Swimming.

#### References

Available on request