

## Siva Reddy

Artificial Intelligence Group  
Department of Computer Science  
University of York, UK

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- Education**
- M.S. by Research, Computer Science,** Oct 2010 – Jan 2012  
Specialization in Natural Language Processing  
University of York, UK
- M.S. by Research, Computer Science,** Jul 2009 – Sep 2010  
Specialization in Natural Language Processing  
IIIT Hyderabad, India
- B.Tech with Honours, Computer Science** Jul 2005 – Jul 2009  
IIIT Hyderabad, India  
GPA: **8.82** out of 10
- Interests** Any topic in NLP/ML/IR. Experience in Lexical Semantics, Compositional Models, Syntactic Parsing, Machine Learning, Question Answering, Crowdsourcing, POS Tagging, Web as a Resource for NLP problems, Crosslingual NLP, Information retrieval, Multiwords, Game Theory, Logic Programming, Word Sense Disambiguation/Induction.
- Passionate about Research, Teaching, Technology and Academic life.
- Research/  
Industrial  
Experience**
- Software/Research Engineer,** Lexical Computing Ltd., UK Dec 2008 – *present*  
Activities: Web Corpora, Syntactic Parsing, Sense Disambiguation,  
Cross Language POS taggers, Building software for many languages.
- Research Assistant,** LTRC, IIIT Hyderabad Jul 2008 – Jan 2010  
Activities: Software API for Indian Languages,  
Sense Disambiguation, Network and System Administration
- Research Intern,** Google Summer of Code, 2009 Summer 2009  
Activities: Open Source Software Development,  
Extending the coverage of Link Parser using syntactic clustering
- Awards/  
Achievements**
- Best Paper Award,** IJCNLP 2011  
ACL 2011 DisCo Shared Task: Best performing system in two evaluations  
Fully Funded Overseas Research Scholarship, University of York (Accep. rate: 2.5%)  
Departmental Overseas Research Scholarship, University of York  
ACL 2010 SemEval Domain Specific WSD Shared Task: 2<sup>nd</sup> best team  
ACL 2010 Student Travel Grant, Sweden.  
Dean's Research List, Year 2010, IIIT Hyderabad  
Dean's Merit List, Spring 2007, Monsoon 2007 and Spring 2009, IIIT Hyderabad  
Prathibha Scholarship (2005-2009), State Government of Andhra Pradesh, India
- Academic  
Service**
- Reviewer** of Expert Systems Journal 2012  
**Subreviewer** of CICLing 2012  
**Subreviewer** of MWE Workshop 2011  
**Programme Committee Member** of York Doctoral Symposium 2011  
**Organizer** of 1<sup>st</sup> LTRC Symposium, 2009, IIIT Hyderabad  
**Student Volunteer** of ICON 2009, Hyderabad, India  
**Idea** of Electronic Courier System, IIIT Hyderabad

**Collaborators** Dr. Adam Kilgarriff, Dr. Ioannis Klapaftis, Dr. Suresh Manandhar, Dr. Diana McCarthy, Dr. Jan Pomikálek, Prof. Rajeev Sangal, Dr. Serge Sharoff, Dr. Mark Stevenson,

**Publications** **2011**

**Siva Reddy**, Ioannis P. Klapaftis, Diana McCarthy, Suresh Manandhar. Dynamic and Static Prototype Vectors for Semantic Composition. In *Proceedings of The 5th International Joint Conference on Natural Language Processing 2011 (IJCNLP 2011)*, Chiang Mai, Thailand **Best Paper Award**

**Siva Reddy**, Diana McCarthy, Suresh Manandhar. An Empirical Study on Compositionality in Compound Nouns In *Proceedings of The 5th International Joint Conference on Natural Language Processing 2011 (IJCNLP 2011)*, Chiang Mai, Thailand

**Siva Reddy**, Serge Sharoff. Cross Language POS Taggers (and other Tools) for Indian Languages: An Experiment with Kannada using Telugu Resources. In *Proceedings of IJCNLP workshop on Cross Lingual Information Access: Computational Linguistics and the Information Need of Multilingual Societies. (CLIA 2011 at IJCNLP 2011)*, Chiang Mai, Thailand

**Siva Reddy**, Diana McCarthy, Suresh Manandhar, Spandana Gella. Exemplar-based Word-Space Model for Compositionality Detection: Shared task system description. In *Proceedings of DISCo-2011 in conjunction with ACL-2011*, 2011  
**Our system was ranked 1<sup>st</sup> in two evaluation categories and 2<sup>nd</sup> in two other.**

**2010**

**Siva Reddy**. Word Sense Disambiguation Using Semantic Categories, Domain Information and Knowledge Sources. Masters Thesis, IIIT Hyderabad, 2010

**Siva Reddy**, Abhilash Inumella. WSD as a Distributed Constraint Optimization Problem. In *Proceedings of the Student Research Workshop of 48th Annual Meeting of the Association for Computational Linguistics (ACL-2010)*, Sweden.

**Siva Reddy**, Abhilash Inumella, Diana McCarthy, Mark Stevenson. IIITH: Unsupervised Domain Specific Word Sense Disambiguation. In *the SemEval-2010 workshop of 48th Annual Meeting of the Association for Computational Linguistics (ACL-2010)*, Sweden. **Our team was ranked 2<sup>nd</sup> in the Domain Specific WSD shared task**

Adam Kilgarriff, **Siva Reddy**, Jan Pomikálek, Avinesh PVS. A corpus factory for many languages. In *Proceedings of the 7th International Conference on Language Resources and Evaluation (LREC-2010)*, Malta, May 2010.

**Siva Reddy**, Abhilash Inumella, Navjyoti Singh, Rajeev Sangal. Hindi Semantic Category Labelling using semantic relatedness measures. In *Proceedings of the 5th International Conference of the Global WordNet Association (GWC-2010)*, Mumbai, India, Jan 2010

**2009**

**Siva Reddy**, Abhilash Inumella, Soma Paul, Rajeev Sangal. All words Unsupervised Semantic Category Labeling. In *Proceedings of Recent Advances in Natural Language Processing (RANLP-2009)* Bulgaria, September, 2009

Adam Kilgarriff, **Siva Reddy**, Jan Pomikálek. Corpus Factory. In *Proceedings of Asialex*, Bangkok, August, 2009

## Teaching Activities

Teaching Assistant for Artificial Intelligence, IIIT Hyderabad                      Spring 2008  
Project Mentor for Natural Language Processing, IIIT Hyderabad                      Monsoon 2008  
Project Mentor for Information Technology Course, IIIT Hyderabad                      Spring 2009

## Talks

The Effect of Polysemy in Compositional Semantics. *University of Malta, Malta*, October 2011, Host: Dr. Mike Rosner

Exemplar-based Word-space model for Compositionality Detection. *University of Leeds, UK*, June 2011, Host: Dr. Katja Markert, Dr. Serge Sharoff.

Compositionality Detection using a Corpus Driven Approach: How to distinguish “couch potato” from “roast potato”. *Sketch Engine Workshop*, March 2011, UK

Word Sketches from Syntactic Parsers. *Sketch Engine Workshop*, March 2011, UK

Oral Presentations include the papers above at *ACL 2010, GWC 2010 and Asialex 2009*.

Poster Presentations include the papers above at *ACL 2010, LREC 2010 and RANLP 2009*.

Corpus Factory. *Lexicom Workshop*, June 2010, Slovenia

Corpus Factory. *Sketch Engine Tutorial, ICON-2009*, December 2009, India

Automatic Extraction of Hindi Verb Selectional Constraints. *IJCNLP-2008 Winter School*, January 2008, India

## Major Projects

Bachelors Honors Project-I on **Question Answering Inference Engine** using Second Order logic and Conceptual-Graph Representation of Natural Language, 2008, IIIT Hyderabad, India

Bachelors Honors Project-II on **Automatic Extraction of Ontology** from a text, 2009, IIIT Hyderabad, India

Google Summer of Code Project on **Statistical Learning and Refinement** of Link Parser Grammatical Rules, 2009, OpenCog, GSoC 2009.

Masters Thesis on **Word Sense Disambiguation** Using Semantic Categories, Domain Information and Knowledge Sources, 2010, IIIT Hyderabad, India

Masters Thesis on **Polysemy in Compositional Distributional Semantics**, 2011, University of York, UK

## Languages

English, Telugu, Hindi. Experience on working with Chinese, Dutch, German, Indonesian, Kannada, Maltese, Norwegian, Swedish, Thai, Turkish, Vietnamese.

## Programming Languages

Python, C++, Java, Perl, Prolog, Matlab, CGI, PHP, HTML/CSS, L<sup>A</sup>T<sub>E</sub>X, SQL, CQL

<b>Transcripts</b>	<b>Institute</b>	<b>Course Name</b>	<b>Grade (Max is A)</b>
	IIIT Hyderabad	Computer Programming	A-
	IIIT Hyderabad	Scripting	A
	IIIT Hyderabad	Algorithms	A-
	IIIT Hyderabad	Principles of Programming Languages	A-
	IIIT Hyderabad	Theory of Computation	A
	IIIT Hyderabad	Operating Systems	A-
	IIIT Hyderabad	Database Management Systems	A
	IIIT Hyderabad	Computer Networks	A
	IIIT Hyderabad	Computer Graphics	A
	IIIT Hyderabad	Natural Language Processing	A-
	IIIT Hyderabad	Computational Linguistics	A-
	IIIT Hyderabad	Natural Language Processing Applications: MT & IE	A
	IIIT Hyderabad	Information Retrieval and Extraction	A
	IIIT Hyderabad	Honors Project1 on Question Answering Inference using Second Order Logic and Conceptual Graphs	A
	IIIT Hyderabad	Honors Project2 on Automatic Extraction of Ontology from natural language text	A
	IIIT Hyderabad	Independent Study on Paninian Linguistics of Indian Languages	A
	University Of York	Pattern Recongition and Neural Networks	Audit
	University Of York	Algorithms for Graphical Models (Bayesian Nets)	Audit
	IIIT Hyderabad	Discrete Maths	A
	IIIT Hyderabad	Numerical Analysis	A
	IIIT Hyderabad	Soft (Fuzzy) Computing	A-
	IIIT Hyderabad	Electrical Science II	A
	IIIT Hyderabad	Physics II	A
	IIIT Hyderabad	Religion, Society and Cultural Heritage of India	A-
	IIIT Hyderabad	Music Appreciation	A
	IIIT Hyderabad	Computational & Rational Appraisal of Indian Analytic Tradition	A