

I am currently working as a **Research Scientist** at the [University of North Texas](#), USA with [Prof. Rodney Nielsen](#) and [Prof. Rada Mihalcea](#) in the [Human Language Technologies \(HiLT\)](#) lab since August 2013.

Prior to this, I was working (January-June, 2013) as a **Chief Engineer** at [Samsung Research India](#), Bangalore. I have also worked as a [European Research Consortium for Informatics and Mathematics \(ERCIM\) Postdoctoral Researcher](#) for one year (2012) at [Norwegian University of Science and Technology \(NTNU\)](#), Trondheim, Norway. I have obtained my PhD (Engineering) from [Jadavpur University](#), India on August, 2012.

Academic Qualifications

1. **Ph.D. (Computer Science and Engineering)** from the [Department of Computer Science and Engineering, Jadavpur University](#), India. Awarded on August 2012 (Submitted on December, 2011). Worked jointly with [Tokyo Institute of Technology](#), Tokyo, Japan.

∅ Thesis Title: “*Opinion Extraction and Summarization from Text Documents in Bengali*”

- ✓ **Advisor:** [Prof. Sivaji Bandyopadhyay](#), Professor, HOD, CSE, Dean Engineering, Jadavpur University, India.

Research Interests

My research interests broadly span three areas and more specifically their intersection: *human language*, *mind/cognition* and *artificial intelligence*. Technically the research area is known as *Natural Language Processing (NLP)*, could be further described as a crossroad of *Formal Linguistics*, *Machine Intelligence* and *Cognitive Science*. I have been working on language technologies since last 9 years.

I am interested in almost every aspects of NLP including various statistical NLP techniques and multiple areas as listed below:

- ✓ Sentiment Analysis / Opinion Mining
- ✓ Mental Lexicon / Distributional Semantic Network
- ✓ Named Entity Recognition (NER)
- ✓ Transliteration
- ✓ Dependency Parsing
- ✓ Information Retrieval
- ✓ Natural language Generation / Information Fusion
- ✓ Morphology & Stemming
- ✓ Chunking and Clause Boundary Identification
- ✓ Eye Tracking
- ✓ Languages in Social Medias
- ✓ Crowdsourcing
- ✓ Computational Humor Recognition and Generation
- ✓ Computational Creativity

I am very much interested in making electronic tools and resources for *under-resourced* and *less-privileged languages*. I have been actively working on two under-resourced languages i.e. **Kokborok** (a Tibeto-Burman tribal language) and **Santhali** (an Austro-Asiatic tribal language).

Currently I am working on these following areas: Machine Translation of Code-Mixed Social Media Text, Personality Detection from Social Network Profiles, Online Contextual Advertising using Sentiment Analysis, Computational Humor and Sentiment Analysis and Eye-Tracking.

Present Research

Here at HiLT lab I am mentoring several masters and doctoral students along with Prof. Nielsen and working on two research projects: COMPANIONBOT and SEEDING COMPREHENSION. I taught a graduate course: CSCE 6933 Dialogue Systems last semester with Prof. Nielsen. Beside these responsibilities I am pursuing my research independently on these following areas:

- ✓ *Machine Translation of Code-Mixed Social Media Text*
- ✓ *Personality Detection from Social Media Interactions*
- ✓ *Online Contextual Advertising using Sentiment Analysis*
- ✓ *Computational Humor*
- ✓ *Sentiment Analysis and Eye-Tracking*

with my own interests. Brief descriptions on each area have been mentioned in my curriculum. I have been fascinated by the evolving research area called Computational Creativity and actively working on various forms of machine's creativity including linguistics creativity such as automatic poetry and including visual and musical form of creativity such as aleatoric painting and tune to lyrics generation and vice versa respectively.

Presently, I have been fascinated by the evolving research area called Computational Creativity and actively working on various forms of machine's creativity including linguistics creativity such as automatic poetry and including visual and musical form of creativity such as aleatoric painting and tune to lyrics generation and vice versa. Here are my philosophical motivations for the Computational Creativity.

Computational Creativity

Cognitive abilities can be divided into three broad categories - intelligence, aesthetics and creativity. Suppose anyone read a sonnet by Shakespeare, and s/he is asked the following questions.

- Do you understand the meaning of this sonnet? If s/he says yes, s/he has used his/her intelligence along with the knowledge of the English language and the world to understand it.
- Do you like this sonnet? Whatever is the answer, s/he is using a subjective model of liking - and this is what is called aesthetic appreciation or sentiment.
- Can you add two more lines to this sonnet? And s/he has to use his/her creative ability to do so.

The concept of Artificial Intelligence is now become six-seven decades older and the majority of the research efforts till date concentrated on the understanding of natural phenomenon like language, text, vision, speech and etc. During the last two decades researchers have witnessed a huge attention towards the affect/sentiment understanding i.e. the second level of cognition but there is no effort on *machine's creativity* or *automatic understanding of creativity* yet or at least very few.

Teaching Experiences

Working with several academic institutions in Asia, Europe and now in USA I have gained valuable experiences.

Teaching Assistant, Department of Computer Science and Engineering (CSE), University of North Texas (UNT)

[CSCE 6933 Dialogue Systems](#) Graduate Course Fall, 2013

Assisting Dr. Nielsen in classroom lecturing.

Teaching Assistant, Department of Computer and Information Science (IDI), Norwegian University of Science and Technology (NTNU)

[TDT4275 - Natural Language Interfaces](#) Graduate Course Spring, 2012

I assisted in preparing the material for the course. He delivered two independent lectures on *Sentiment Analysis and Multimodality* and *Text Summarization*. Finally prepared exam question for the semester with Prof. Björn Gambäck.

Present Duties & Research @ HiLT, CSE, UNT

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| Position | Research Scientist |
| Duties | <ul style="list-style-type: none"> ✓ Managing and guiding PhD and master students at HiLT lab with Rodney Nielsen. ✓ Assisting teaching Prof. Rodney for CSCE 6933 Dialogue Systems (Fall 2013). |
| Research Projects <i>(Working for)</i> | <p>Companionbots (Spoken Dialogue Educational Health and Wellbeing Companion Robots)</p> <p>The number of people over 65 in the U.S. will more than double in roughly the first quarter of this century. Additionally, many suffer from depression. The aim of the project is to support these seniors via emotive spoken-dialogue companion robots (Companionbots; NSF \$1.96M total 2011-2015; UNT, CU, DU, UCD Anschutz Medical Campus, and Boulder Language Technologies). The focus of the research is on dialoguing, especially generating and answering questions, in the context of providing education and training related to depression, monitoring participants for signs of physical, mental or emotional deterioration, and being a companion.</p> <p>Comprehension SEEDING (Classroom Response Technology)</p> <p>Aim of the project is to help class instructors assess student knowledge and skills in real-time (Comprehension SEEDING; Nielsen PI, IES \$1.83M 2011-2014 with ASU and UCD). Students submit free text responses to instructors' open-ended questions via mobile devices to an NLP system that clusters the answers and provides the instructor feedback on the types of misconceptions and their frequency, among other things.</p> |

Industry Research Experience at Samsung Research India

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| Duration | January 14th – June 7th 2013 |
| Position | Chief Engineer |

Context Sensitive Sentiment Analysis

Aim

The aim of the in-house project is to develop sentimentally intelligent virtual agent for next generation Samsung Galaxy series. The agent will be capable to recognize multi-modal emotion from video/image, speech and text from social medias like twitter and Facebook.

Online Contextual Advertising using Sentiment Analysis

Aim

The aim of the project is to develop Android apps, will promote sentimentally contextual ads particularly for Samsung products. (This work lead to a USA patent application: please see the publication section)

Post-Doctoral Experience

During January, 2012-January, 2013I worked as a [European Research Consortium for Informatics and Mathematics \(ERCIM\)](#) Postdoctoral fellow at [Norwegian University of Science and Technology \(NTNU\)](#), [Department of Computer and Information Science \(IDI\)](#), Trondheim, Norway.

ERCIM Scientific Report of my fellowship work:

https://fellowship.ercim.eu/uploads/2/2_392_Das_Amitava_tech_report1.pdf

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| Duration | 5 th January, 2012-4 th January, 2013 |
| Host | Prof. Björn Gambäck |
| Research Agenda | Current sentiment analysis systems rely on static (context independent) sentiment lexica with proximity based fixed-point prior polarities. However, sentiment orientation changes with context and these lexical resources give no indication of which value to pick at what context. The general trend is to pick the highest one, but which that is may vary at context. To overcome the problems of the present proximity-based static sentiment lexicon techniques, Prof. Gambäck and me proposed a new way to represent sentiment knowledge in a Vector Space Model. This model can store dynamic prior polarity with varying contextual information. The representation of the sentiment knowledge in the <i>Conceptual Spaces of distributional Semantics</i> is termed <i>Sentimantics</i> . |
| Research Visits | <ul style="list-style-type: none"> ✓ Swedish Institute of Computer Science (SICS), Stockholm, Sweden ✓ KTH Royal Institute of Technology, Stockholm, Sweden <ul style="list-style-type: none"> Ø Worked on Sentiment Analysis form users review on Stockholm bus service. ✓ Department of Linguistics and Philosophy, Uppsala University, Sweden <ul style="list-style-type: none"> Ø Exchanged ideas on semantic parsing and cross-lingual NER ✓ GAVAGAI, Stockholm, Sweden: A spinout startup from SICS <ul style="list-style-type: none"> Ø Worked on Sentiment Analysis from Social Medias like Twitter ✓ Center for Research and Innovation in Translation and Translation Technology (CRITT), Copenhagen Business School, Copenhagen, Denmark <ul style="list-style-type: none"> Ø Worked on Eye-Tracking and Sentiment Search |

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| Research Project | Part time worked for COMPANIONS project. The project has developed virtual Companions for conversation to change the way people think about the relationships of people to computers and the Internet. This work has resulted system that go beyond traditional task-based interaction into the realm of social interaction. The project has 14 partners from across Europe including University of Sheffield: Roger Moore, University of Oxford: Stephen Pulman. |
| Teaching Experience | ✓ TDT4275 - Natural Language Interfaces. |

Associations & Research Experiences during Doctoral Study

| Sentiment Analysis Where AI Meets Psychology (SAAIP) | |
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| Duration | 16 th September, 2011-31 st December, 2011 |
| Aim | Development of an application tool for Psychiatric Analysis for patients. This tool might help doctors to detect psychiatric sentiment analysis as well as general people will be benefited from this. |
| Partners | Prof. Manabu Okumura from Precision and Intelligence Laboratory , Advanced Information Processing Division: Okumura Group Tokyo Institute of Technology and Prof. Sivaji Bandyopadhyay from CSE Department, Jadavpur University are the Research Leaders of this project. |
| Activities | <ul style="list-style-type: none"> ➤ 1 month (19th Feb-31st March, 2011) visit @ Precision and Intelligence Laboratory, Tokyo Institute of Technology ➤ Organized Workshop: Sentiment Analysis Where AI Meets Psychology (SAAIP) held with JCNLP 2011, November 13, 2011, Chiang Mai, Thailand |

| English to Indian Languages Machine Translation (EILMT) | |
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| Duration | 1 st July, 2010-31 st August, 2010 |
| Aim | The EILMT system aims to design and deploy a Machine Translation System from English to Indian languages in Tourism and Healthcare Domains. Department of Information Technology, MCIT, and Government of India fund the project. The chosen language pairs are listed below: English to following languages: Tamil, Telugu, Marathi, Bengali (Responsible for), Tamil, Urdu, Kannada, Punjabi and Malayalam. |
| Partners | Jadavpur University (worked for), C-DAC Mumbai , IISc Bangalore , IIT Hyderabad , C-DAC Pune , IIT Mumbai , IIIT Allahabad , Utkal University Bangalore , Amrita University Coimbatore , Banasthali Vidyapeeth , Banasthali , North Maharashtra University |
| Activities | <ul style="list-style-type: none"> ➤ JU was mainly responsible for Statistical Machine Translation (SMT) for English-Bengali language pair. ➤ JU designed modules for automatic cross-linking of English and Bengali synsets. |

| Indian Languages to Indian Language machine Translation Project (IL-ILMT) | |
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| Duration | 16 th October, 2006-30 th June, 2010 |
| Aim | The 'ILMT' system is a machine translation system, which produces machine translation (MT) from one Indian language (IL) to another Indian language. The system is bi-directional and works in (a) general domain and (b) tourism and pilgrimage. This consortium project is funded by MCIT, DIT. The chosen language pairs are listed below: Hindi to/from following languages: Tamil, Telugu, Marathi, Bengali (Responsible for), Urdu, Kannada and Punjabi |
| Partners | Jadavpur University (worked for), IIT Hyderabad , University of Hyderabad , IIT Kharagpur , IIT Bombay , AUKBC Chennai , CDAC Pune , IISc Bangalore , Tamil University , IIIT Allahabad , CDAC Noida , RSVP Tirupati |
| Activities | <ul style="list-style-type: none"> ➤ JU was mainly responsible for language resource generation for Bengali along with IIT Kharagpur. ➤ Attended several workshops, discussions and meetings nationwide. |

Awards & Honours

- **Session Chair** (Named Entity Recognition session) in 24th *International Conference on Computational Linguistics (COLING 2012)*, IIT Mumbai, India.
- Received European Research Consortium for Informatics and Mathematics (**ERCIM**) "**ALAIN BENSOUSSAN**" **Postdoctoral FELLOWSHIP** for 2011-2012, Host Institution Norwegian University of Science and Technology (**NTNU**), Trondheim, Norway.
- **Best Student Paper Award** for paper entitled "**Can We Mimic Human Pragmatics Knowledge into Computational Lexicon?**" in International Conference on Natural Language Processing (**ICON 2010**), IIT Kharagpur, India.
- Microsoft India Student Travel Grant Award to Attend COLING-2010 and NLPKE-2010 (Beijing, China).
- Microsoft India Student Travel Grant Award to Attend ACL-IJCNLP 2009 (Singapore).
- Position in International Transliteration Competition
 - 1st for English-Bengali transliteration, In Named Entity Workshop (NEWS-2010).
 - 3rd for English-Hindi transliteration, In Named Entity Workshop (NEWS-2009).

Professional Services

Membership

- ✓ [Association for Computational Linguistics \(ACL\)](#)
- ✓ [Asian Federation of Natural Language Processing \(AFNLP\)](#)
- ✓ [Wikimedia India](#)

Program Committee Member In

- ✓ [Mining Intelligence and Knowledge Exploration \(MIKE 2013\)](#), **Tamil Nadu, India.**
- ✓ [11th Workshop on Asian Language Resources \(ALR\)](#), **Nagoya, Japan.**

- ✓ [The 6th International Joint Conference on Natural Language Processing \(IJCNLP\)](#), Nagoya, Japan.
- ✓ [Sentiment Elicitation from Natural Text for Information Retrieval and Extraction \(SENTIRE\)](#), IEEE ICDM workshop, Dallas, Texas, USA.
- ✓ [The 2013 International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction \(SBP 2013\)](#), Washington, USA.
- ✓ [The 2nd International Conference on Intelligent Interactive Technologies and Multimedia \(IITM-2013\)](#), Allahabad, India.
- ✓ [24th International Conference on Computational Linguistics \(COLING 2012\)](#), Mumbai, India.
- ✓ [2nd Workshop on Sentiment Analysis where AI meets Psychology \(SAAIP 2012\)](#), COLING 2012, Mumbai, India.
- ✓ [IEEE-ICDM Workshop on Sentiment Elicitation from Natural Text for Information Retrieval and Extraction \(SENTIRE 2012\)](#), Brussels, Belgium.
- ✓ [WISDOM \(Workshop on Issues of Sentiment Discovery and Opinion Mining\)](#), ACM KDD 2012 Workshop, Beijing, China.
- ✓ [The first Workshop on Intelligent Approaches to Sentiment Mining and Emotion Analysis \(WISMEA\)](#), XXI Brazilian Symposium on Artificial Intelligence – SBIA 2012, Curitiba, Paraná, Brazil.

Reviewer In

Journals

- ✓ [Elsevier Knowledge-Based Systems](#)
- ✓ [Elsevier Information Processing & Management](#)
- ✓ [ACM Transactions on Asian Language Information Processing \(TALIP\)](#)
- ✓ [Language Resources and Evaluation \(LRE\)](#), Springer
- ✓ [International Journal of Library and Information Science \(IJLIS\)](#). Academic Journal Group
- ✓ [Educational Research Journal \(ERJ\)](#)
- ✓ [International Journal of Science and Technology Education Research \(IJSTER\)](#)
- ✓ [Journal of Engineering and Computer Innovations \(JECI\)](#)

Conferences

- ✓ [2014 International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction \(SBP14\)](#), Washington DC, USA.
- ✓ [The 25th International Florida AI Research Society Conference \(FLAIR-2012\)](#), Florida, USA.
- ✓ [13th International Conference on Intelligent Text Processing and Computational Linguistics \(CICLING-2012\)](#), Delhi, India.
- ✓ [The 16th World Multi-Conference on Systemics, Cybernetics and Informatics: \(WMSCI 2012\)](#), Orlando, Florida, USA.
- ✓ [National Conference on Emerging Trends and Applications in Computer Science – 2012 \(NCETACS - 2012\)](#), Shillong, Meghalaya, India.
- ✓ [12th International Conference on Intelligent Text Processing and Computational Linguistics \(CICLING-2011\)](#), Tokyo, Japan.

- ✓ [The Mexican International Conference on Artificial Intelligence \(MICA I 2011\)](#), Mexico City, Mexico.
- ✓ [The 3rd Named Entity Workshop \(NEWS 2011\)](#), Chiang Mai, Thailand.
- ✓ [The 3rd International Workshop on Search and Mining User-generated Contents \(SMUC 2011\)](#), Glasgow, UK.
- ✓ [The 7th Asia Information Retrieval Societies Conference \(AIRS 2011\)](#), Dubai, UAE.
- ✓ [The National Conference on Computer Science and Engineering \(CCSE-2011\)](#), Kochi, India.
- ✓ [5th Indian International Conference on Artificial Intelligence \(IICAI-11\)](#), Tumkur, India.
- ✓ [The 6th IEEE International Conference on Natural Language Processing and Knowledge Engineering \(IEEE NLP-KE'10\)](#), Beijing, China.
- ✓ [11th International Conference on Intelligent Text Processing and Computational Linguistics \(CICLING-2010\)](#), Iași, Romania.
- ✓ [International Conference on Natural Language Processing \(ICON\), 2010](#), Kharagpur, India.
- ✓ [International Conference on Natural Language Processing \(ICON\), 2009](#), Hyderabad, India.
- ✓ [The 23rd International Florida AI Research Society Conference \(FLAIR-2009\)](#), Grainau, Germany.

Session Chair In

- ✓ [24th International Conference on Computational Linguistics \(COLING 2012\)](#), IIT Bombay, Mumbai, India.
- ✓ [Workshop on South and Southeast Asian Natural Languages Processing - 2011](#), IJCNLP 2011, Chiang Mai, Thailand.
- ✓ [The 5th International Workshop On Cross Lingual Information Access: Computational Linguistics and the Information Need of Multilingual Societies](#), IJCNLP 2011, Chiang Mai, Thailand.

Organizer In

- Ø [5th Workshop on South and Southeast Asian Natural Languages Processing \(WSSANLP 2014\)](#), collocated with COLING 2014, August, Dublin, Ireland.
- Ø [Mining Intelligence and Knowledge Exploration \(MIKE 2013\)](#), December, VHNSN College, Tamil Nadu, India.
- Ø [First Workshop on Sentiment Analysis for Indian Languages \(SAIL 2013\)](#), collocated with MIKE 2013, December, VHNSN College, Tamil Nadu, India.
- Ø [3rd Workshop on Sentiment Analysis where AI meets Psychology \(SAAIP 2011\)](#), collocated with IJCNLP 2013, October, Nagoya, Japan.
- Ø [4th Workshop on South and Southeast Asian Natural Languages Processing \(WSSANLP 2013\)](#), collocated with IJCNLP 2013, October, Nagoya, Japan.
- Ø [First Workshop on Internet Advertising Using Sentiment Analysis \(AdSent 2013\)](#)
Collocated with ICDM 2013, Dallas, Texas, USA, December 2013.
- Ø [3rd Workshop on South and Southeast Asian Natural Languages Processing \(WSSANLP 2012\)](#), collocated with COLING 2012, December, Mumbai, India.
- Ø [2nd Workshop on Sentiment Analysis where AI meets Psychology \(SAAIP 2012\)](#), collocated with COLING 2012, December, Mumbai, India.

- Ø [First Workshop on Sentiment Analysis for Asian Languages \(SAAL 2012\)](#), collocated with The 25th International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems 2012 (IEA-AIE), June, Dalian, China.
- Ø [Brain Inspired Opinion Mining and Sentiment Analysis \(BIOMSA\)](#), collocated with the 11th IEEE International Conference on Cognitive Informatics & Cognitive Computing (ICCI*CC), August 2012, Kyoto, Japan.
- Ø [2nd Workshop on South and Southeast Asian Natural Languages Processing \(WSSANLP 2011\)](#), collocated with IJCNLP 2011, November, Chiang Mai, Thailand.
- Ø [First Workshop on Sentiment Analysis where AI meets Psychology \(SAAIP 2011\)](#), SAAIP - collocated with IJCNLP 2011, November, Chiang Mai, Thailand.

Invited Talks

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| Topic | <i>Online Contextual Advertising using Sentiment Analysis</i> |
| Date | 1 & 2 May, 2014 |
| Venue | Sentiment Analysis Innovation , San Francisco, USA |
| Topic | <i>Sentiment Analysis Open Up New Business Horizons</i> |
| Date | 15 th April, 2013 |
| Venue | Adobe Research India , Bangalore, India |
| Topic | <i>Sentimental Intelligence</i> |
| Date | 26 th March, 2013 |
| Venue | Xerox Research Centre (XRCE) , Grenoble, India |
| Topic | <i>Sentimental Intelligence</i> |
| Date | 29 th February, 2013 |
| Venue | Samsung Research India , Bangalore, India |
| Topic | <i>Sentimental Analysis: The New Trend of Text Analysis</i> |
| Date | 8 th January, 2013 |
| Venue | International Institute of Information Technology Hyderabad (IIITH) , Hyderabad, India |
| Topic | <i>Sentiment Analysis-The Hard Problem</i> |
| Date | 21 st November 2012 |
| Venue | Copenhagen Business School , Copenhagen, Denmark |
| Topic | <i>Commercial Possibilities of Sentiment Analysis</i> |
| Date | 7 th May 2012 |
| Venue | GAVAGAI , A Spinout startup company from Swedish Institute of Computer Science (SICS) , |

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| Topic | <i>Sentiment...Human Intelligence</i> |
| Date | 3 rd February 2012 |
| Venue | Department of Computer and Information Science (IDI), Norwegian University of Science and |

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| Topic | <i>Let's Create Sentiment Resources for my Own Language</i> |
| Date | 30 th May, 2011 |
| Venue | Advanced School on Natural Language Processing (IASNLP 2011) , at International Institute of |

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| Topic | <i>Sentiment Analysis</i> |
| Date | 3 rd March, 2011 |
| Venue | Tsujii Laboratory , University of Tokyo, Tokyo, Japan |

Conference/ Workshop / Summer School Attended and Talks

- ✓ [24th International Conference on Computational Linguistics \(COLING 2012\)](#)
- ✓ [3rdWorkshop on Computational Approaches to Subjectivity and Sentiment Analysis \(WASSA\)](#), Jeju, Korea
 - ü **Sentimantics: The Conceptual Spaces for Lexical Sentiment Polarity Representation with Contextuality**
- ✓ [International Conference on Web Intelligence, Mining and Semantics \(WIMS 2012\)](#), Craiova, Romania
 - ü **Sentiment Analysis: What is the End User's Requirement?**
- ✓ [The Scandinavian Workshop on Applied Eye Tracking \(SWAET\)](#), Stockholm, Sweden
- ✓ [13th International Conference on Intelligent Text Processing and Computational Linguistics \(CICLING-2011\)](#), Delhi, India
 - ü **The 5W Structure for Sentiment Summarization-Visualization-Tracking. (Oral+Poster)**
- ✓ [12th International Conference on Intelligent Text Processing and Computational Linguistics \(CICLING-2011\)](#), Tokyo, Japan
- ✓ [The 3rd IndoWordNet Workshop](#)
 - ü **Dr. Sentiment Creates SentiWordNet(s) for Indian Languages Involving Internet Population. (Oral)**
- ✓ [THE 8TH INTERNATIONAL CONFERENCE ON NATURAL LANGUAGE PROCESSING \(ICON 2010\)](#), IIT KHARAGPUR, INDIA
 - ü **Can We Mimic Human Pragmatics Knowledge into Computational Lexicon? (Oral)**
- ✓ [THE 6TH IEEE INTERNATIONAL CONFERENCE ON NATURAL LANGUAGE PROCESSING AND KNOWLEDGE ENGINEERING \(IEEE NLP-KE'10\)](#), BEIJING, CHINA
 - ü **Semantic Role Labeling for Bengali Noun using 5Ws. (Oral)**
- ✓ [THE 23RD INTERNATIONAL CONFERENCE ON COMPUTATIONAL LINGUISTICS \(COLING 2010\)](#), BEIJING, CHINA
 - ü **SentiWordNet for Indian Languages. (Oral)**
 - ü **SemanticNet-Perception of Human Pragmatics. (Oral)**
 - ü **Clause Identification and Classification in Bengali. (Oral)**
 - ü **Topic-Based Bengali Opinion Summarization. (Poster).**

- ✓ [7TH INTERNATIONAL CONFERENCE ON NATURAL LANGUAGE PROCESSING \(ICON-2009\), HYDERABAD, INDIA](#)
 - ü *Detection in English and Bengali: A CRF-based Approach.(Poster)*
- ✓ [ACL IJCNLP-2009, SINGAPORE](#)
 - ü *English to Hindi Machine Transliteration at NEWS 2009.(Poster)*
- ✓ [FORUM FOR INFORMATION RETRIEVAL EVALUATION \(FIRE-08\), KOLKATA, INDIA](#)
 - ü *English Bengali Ad-hoc Monolingual Information Retrieval. (Oral)*
- ✓ [SUMMER SCHOOL ON NATURAL LANGUAGE PROCESSING AND TEXT MINING, IIT KHARAGPUR, INDIA](#)
- ✓ [3RD INTERNATIONAL JOINT CONFERENCE ON NATURAL LANGUAGE PROCESSING \(IJCNLP-08\), HYDERABAD, INDIA](#)
 - ü *Language Independent Named Entity Recognition in Indian Languages.(Oral)*

Publications

Patent

Internet Advertising Based on User's Personality: Automatically Detected from Social Network Interactions. USA Patent. Filed while in Samsung Research India.

Thesis

A. Das.PhD Thesis: *Opinion Extraction and Summarization from Text Documents in Bengali.* Jadavpur University, Kolkata, August 2012.

Book Chapters

1. A. Das, S. Bandyopadhyay and B. Gambäck.(2013). *যন্ত্রনা (Jantra-Na: Not-Machine) can only feel যন্ত্রনা (Jantrana: Pain)!* Technical Challenges and Design Issues in Bangla Language Processing. Chapter 15, IGI Global Publication.
2. A. Ekbal, S. Bandyopadhyay and A. Das. (2007). *Three Different Models for Named Entity Recognition in Bengali.* In the Proceedings of the International Workshop on Advances in Pattern Recognition (IWAPR-2007), Pages 161-170, July, UK, Springer (Advances in Pattern Recognition Series).

Journals

1. A. Das, and S. Bandyopadhyay (2010). *Phrase-level Polarity Identification for Bengali.* In International Journal of Computational Linguistics and Applications (IJCLA), Vol. 1, No. 1-2, Pages 169-182, Jan-Dec 2010, ISSN 0976-0962.
2. A. Das, and S. Bandyopadhyay (2010). *Syntactic Sentence Fusion Techniques for Bengali.* In International Journal of Computer Science and Information Technologies (IJCSIT). ISSN: 0975-9646. Vol. 2 (1), Pages 494-503.

Conferences / Workshops

1. **A. Das.** (2013). *Antaryāmī: The Smart Keyboard for Indian Languages*. In the Proceeding of the 1st Workshop on Techniques on Basic Tool Creation and Its Applications (TBT CIA 2013), ICON 2013, December, C-DAC, Noida, India.
2. **A. Das,** Balamurali AR, and Pratibha Moogi. (2013). **Automatic Ad-Placement based on Automatic Personality Detection from Social Network Textual interactions and/or SMS(s)**. Samsung Best Paper Award (SBPA), August, Seoul, Korea.
3. **A. Das,** and B. Gambäck. (2013). *Sentimental Eyes!* In the Proceeding of the 15th International Conference on Human-Computer Interaction (HCI 2013), Pages 310-318, July, Las Vegas, Nevada, USA.
4. B.G. Patra, K. Debbarma, S. Debbarma, D. Das, **A. Das,** and S. Bandyopadhyay. (2012). *A Light Weight Stemmer in Kokborok*, In the Proceeding of the 24th ROCLING Conference (ROCLING 2012), Pages 318-325, September, Chung-Li, Taiwan.
5. **A. Das,** and B. Gambäck. (2012). *Exploiting 5W Annotations for Opinion Tracking*. In the Proceeding of the Workshop on Exploiting Semantic Annotations in Information Retrieval (ESAIR), CIKM 2012, Pages 3-4, October, Maui, Hawaii, USA.
6. **A. Das,** S. Bandyopadhyay, and B. Gambäck. (2012). *Sentimantics: The Conceptual Spaces for Lexical Sentiment Polarity Representation with Contextuality*. In the Proceeding of the 3rd Workshop on Computational Approaches to Subjectivity and Sentiment Analysis (WASSA), ACL, Pages 38–46, Jeju, South Korea.
7. **A. Das,** S. Bandyopadhyay, and B. Gambäck. (2012). **Sentiment Analysis: What is the End User's Requirement?** In the Proceeding of the International Conference on Web Intelligence, Mining and Semantics (WIMS 12), June, Craiova, Romania.
8. **A. Das,** and B. Gambäck. (2012). **Sentimantics: the New Way to Define Sentimental Semantics**. In the Proceeding of the Ninth International Symposium on Neural Networks (ISNN 2012), Brain Inspired Cognitive Systems, July, Shenyang, China.
9. **A. Das,** and S. Bandyopadhyay. (2012). **The 5W Structure for Sentiment Summarization-Visualization-Tracking**. In the Proceeding of the 13th International Conference on Intelligent Text Processing and Computational Linguistics (CICLING 2012), Pages 540-555, March, Delhi, India.
10. **A. Das,** and S. Bandyopadhyay. (2011). *Dr. Sentiment Knows Everything!* In the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies (ACL/HLT 2011 Demo Session), Pages 50-55, June, Portland, Oregon, USA.
11. **A. Das.** (2011). *PsychoSentiWordNet*. In the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies (ACL/HLT 2011 Student Session), Pages 52-57, June, Portland, Oregon, USA.
12. **A. Das.** (2010). *Can We Mimic Human Pragmatics Knowledge into Computational Lexicon?* In the International Conference on Natural Language Processing (ICON 2010), December, Kharagpur, India.

Best Student Paper Award

13. **A. Das,** and S. Bandyopadhyay. (2010). *Dr. Sentiment Creates SentiWordNet(s) for Indian Languages Involving Internet Population*. In the IndoWordNet Workshop (ICON 2010), December, Kharagpur, India.
14. **A. Das** and S. Bandyopadhyay. (2010). *Towards The Global SentiWordNet*. In the Workshop on Model and Measurement of Meaning (M3), PACLIC 24, Pages 799-808, November, Sendai, Japan.

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