Amita Misra
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## Education

Ph.D. student, Computer Science, September 2012-expected 2017
University of California, Santa Cruz, 95064

MS Computer Science, 2015
GPA: 3.8
University of California, Santa Cruz

## Research Focus

Opinion and argument mining in social media, sentiment analysis of evaluative expressions and stance classification. Argument extraction and similarity in opinionated dialog.
Machine learning, statistical data mining and its application to Natural Language Processing.

Advisor: Prof. Marilyn Walker

## Refereed publications

- *Amita Misra, Brian Ecker and Marilyn Walker. Measuring the similarity of sentential arguments in dialogue. SIGDIAL 2016.*
- *Amita Misra, Brian Ecker, Theodore Handleman, Nicolas Hahn and Marilyn Walker. Semi-Supervised Approach to Detecting Stance in Tweets. SemEval 2016.*
- *Amita Misra, Pranav Anand, Jean E. Fox Tree and Marilyn Walker. Using Summarization to Discover Argument Facets in Online Idealogical Dialog. NAACL-HLT 2015.*
- *Amita Misra and Marilyn Walker. Topic independent identification of agreement and disagreement in social media dialogue. SIGDIAL 2013.*

## Relevant Courses

University of California, Santa Cruz

- Machine Learning, Computational Models of Discourse and Dialogue.
- Information Retrieval, Natural Language Processing, Algorithms.
- Data Mining and Business Analytics in Knowledge Services.

Summer School

- Machine Learning Summer School at the University of California, Santa Cruz UCSC 2012.
- Natural Language Generation Summer School at the University of Aberdeen, 2015.

Coursera

Machine Learning by Andrew Ng, 2012.

## Research and Projects

2016 *Summer Research Intern, Nissan Research center.*

2014-Present I*dentifying Disagreements and Their Basis in Online Social and Political Discussions.*
Proposed Ph.D. Topic, Graduate Student Researcher, UC Santa Cruz.

- Used human Summarization as a probe to discover saliency.
- Reliable annotations using Mechanical Turk.
- Proposed an approach to discover Argument Facets in a dialog.
- Proposed a new task of Argument Facet Similarity.

2015 *Extracting central propositions for an argument Facet.*

- Extracted high quality arguments from social media debates.
- Supervised two students for 10 weeks of Summer Undergraduate Research.

2015 *Stance classification in twitter.*

- Text normalization of twitter data.
- Identified sentiment associated with the target using opinion target pairs.
- Supervised 4 students for a group project.

2013 *Implemented Sprinkling: Supervised Latent Semantic Indexing.*

- The goal was to improve agreement/disagreement prediction accuracy.
- Used supervised Latent Semantic Analysis for classification.

2013 *Supervised classification of movie scenes into different genre.*

A movie scene database categorized into different genres such as romance, action and comedy using movie titles classified by genre.

- Scrape and process data from the IMDb website.
- Role of Part of speech tags in genre identification.

2012 *Topic independent identification of disagreement in Online Debate Forums.*

- Proposed topic independent model for identification of disagreement.
- Built a classifier based on a range of theoretically motivated features, that achieved a classification Prediction accuracy of 66%, an improvement over a unigram baseline of an absolute 6%. .

## Technical Skills

- Languages: Python, Java, and HTML.
- Tools: StanfordCoreNLP, NLTK, Weka, Sci-kit, Mechanical Turk.

Light:

- Packages: R, Latex.
- Database: MYSQL.

## Teaching Experience

- Teaching Assistant for Introduction to Computer Science, University of California, Santa Cruz, 2014.
- Teaching Assistant for Introduction to Programming, University of California, Santa Cruz, 2015, 2016.