

NLP Application Area Investigations

Due Date: December 8

(post to a discussion group in Blackboard)

Choose an Application Area

First and second choices submitted by Friday, Nov. 17 by email to Prof. McCracken

Topic areas will be finalized by me on Monday, Nov. 27

NLP Application Areas

We have introductions to most of these areas, but if you're interested in one that we have not introduced (HCI/Dialogs, Language Generation, Image to Text), you may want to find general materials.

- Machine Translation
- Information Retrieval/Search Engines
- Information Extraction/Text Mining
- Human Computer Interfaces / Dialogues, including “chatbots”
- Summarization
- Language Generation
- Question/Answering Systems
- Image to Text
- Sentiment Analysis (from Week 10 - I wouldn't normally call this an NLP application, but it lends itself to this type of investigation.)
- Or you may suggest another area of interest to you

Student Investigations

1. Explore/research the topic area: use web searching to find examples, demos, or reference materials
2. Ideas for the kinds of things to do – your choice will depend on the area:
 - Search the web and find examples of the application area
 - Ideas for examples:
 - companies that provide services in the area
 - software available in the area
 - demo web sites
 - Details you can give for the examples
 - Describe the company services, the software, or try out examples in the demo and discuss the results
 - Describe how NLP contributes to this application area, if possible
 - Describe issues or difficulties
 - or Read research papers and describe advances in the area, such as improvements to algorithms or techniques or successes in the application area

3. Prepare 6-10 slides on the area, including title slide and references slide. If working in a group, add approximately 3 slides per person that covers more examples or details in your NLP area.

- Or choose an equivalent mode of presentation materials, with permission
- length is approximate because people put different amounts of information per slide
- last slide should be a list of references that you read or viewed and think others would find interesting
- Example of possible slide organization
 - Suppose that you chose Machine Translation and you chose three companies that do language translation, including one with a demo web site
 - For your slides, you give a title slide (1), one slide on each company describing them (3) and another slide on the demo site, giving examples of text that you tried and making observations (1-2) and the references slide giving the URLs of the web sites and any other sites or resources that you found interesting (1) for a total of 6-7 slides

4. Non-duplication of materials

- Check if other materials have already been submitted in your area to the Blackboard discussion and make sure that your slides do not duplicate what someone else has done. For example, if the previous person has chosen the same example software or company as you, give some different details about that example or company. If they chose a demo site, be sure to try out different examples and discuss the results. (It's a good idea for people in the same area to compare notes ahead of submission.)
- Submit the slides or materials to a discussion group in Blackboard. If duplicate materials are submitted within the same day, then that's o.k.
- Groups should submit only one set of slides to the Blackboard discussion.

5. Each person should also submit the slides to the Blackboard Assignment.