

Finding datasets / resources

LING575 Analyzing Neural Language Models

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Other sources of data

- Thanks, Rachel Rudinger, for the presentation on decomp.io!
 - Hopefully some of you will do analysis projects using that data
- Now: just a few pointers on finding data for your projects

Roles for data

- You will need data for your analysis project
- One simple case: data captures linguistic feature X, ask which representations in which models can capture that feature
 - (Can be good to use more than one dataset here if possible)
- More complicated: generate your own data
 - Because you hypothesize that model X will struggle with it (“adversarial”)
 - To carefully control various linguistic variables
 - Can borrow / take inspiration from / build upon examples from linguistics papers
 - Examples: [Marvin and Linzen 2018](#), [Warstadt et al 2019](#), [McCoy et al 2019](#)

What makes a good dataset?

- Can depend on the project; try to find/build data that's motivated by your question/hypothesis
- Well-designed:
 - Clear annotation guidelines that yield consistent results
 - Targets the intended task
- Relatively large (somewhat less important for analysis projects)
- Precedent in the literature
 - If your project involves phenomena that are well-studied in NLP, use (and/or compare with) existing datasets!
 - Can, e.g., be a new analysis using data from a paper we've already discussed

LDC; Treehouse DB

- The Linguistics Data Consortium has many excellent datasets (think Penn Treebank)
- Many of those, and lots more, pre-installed on paths
 - For a complete directory, see <https://cldb.ling.washington.edu/>

SemEval

- International Workshop on Semantic Evaluation
- Each year, a shared task (or tasks)
 - Multiple teams build models for one task
 - Data is well-designed to be consumable by teams
- 2020 (links to older): <http://alt.qcri.org/semeval2020/index.php?id=tasks>
- Not every task will be appropriate; but you can search for your keywords + “semeval” and see if there’s been a task in the past
- NB: there are other shared tasks, not just SemEval, so you can also try keywords + “shared task”

Some general resources

- New-ish: Google Dataset Search
 - <https://datasetsearch.research.google.com/>
 - Personally some mixed results so far, but could be very useful
- The Big Bad NLP Database
 - <https://quantumstat.com/dataset/dataset.html>
 - New, has large/standard datasets, but fairly small coverage (low recall)

Special Topics Presentations

Presentations

- Each group will be responsible for leading an ~45 minute discussion on a special topic of their choosing
- For example:
 - A deep dive into one or two papers that are important to your group's project
 - Survey of a method / model / dataset that you are using that was not covered in the earlier lectures
- Present material, but also lead/guide a discussion, to make these sessions as much seminar-style as possible
 - You don't need to have all the answers about everything that could possibly come up

Logistics

- Sign up here:
 - <https://docs.google.com/spreadsheets/d/1sVjpJFRq99k0vPvJSb4zmqBsik53Odfap5O4ruYjNqQ/edit?usp=sharing>
 - For now: pick a time slot. You only need to fill in the first two columns.
 - NB: there are 7 groups; so one week will have only one presentation
- **One full week before your presentation:**
 - Fill in topic, and list of reading(s) / resources
 - Email me as well
 - I will post to the website so that everyone can read in advance

Next time

- Some tips / advice about
 - Managing projects
 - Writing papers
- Useful resources / libraries
- Walkthrough of basic diagnostic classifier example