

# ReactionBot

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# Introduction

- ◆ Finds a reaction GIF to respond to a Reddit thread
- ◆ Gathers data from [reactiongifs.com](http://reactiongifs.com) – URLs and tags of GIFs
- ◆ Classifies Reddit threads using a training set and finds a GIF with tags related to the main topic(s)

# The Problem

- ◆ Involves topic identification and data matching
- ◆ Must be able to extract main topic or topics of discussion in a thread

# The Solution

- ◆ Latent Dirichlet Allocation (LDA)!
- ◆ Our training set is created by using LDA on several Reddit threads, treated as a single large document
- ◆ Separates data into topics and weighs words based on how relevant they are to those topics
- ◆ We used gensim Python library for LDA implementation

# Implementation

- 💧 GIF Scraper
- 💧 Obtain (2 –day) old threads for training
- 💧 Construct an LDA model (10 passes)
- 💧 Sort topics by weight, then find topics associated with the best topic
- 💧 Post relevant and random GIFs
- 💧 Evaluate

# The Results

- ◆ [http://www.reddit.com/r/funny/comments/1t9r8k/university\\_sells\\_meth\\_to\\_students/ce66pqi?context=3](http://www.reddit.com/r/funny/comments/1t9r8k/university_sells_meth_to_students/ce66pqi?context=3) (relevant)
- ◆ [http://www.reddit.com/r/funny/comments/1taxwe/so\\_my\\_brother\\_decided\\_to\\_announce\\_that\\_he\\_was\\_gay/ce69a5o](http://www.reddit.com/r/funny/comments/1taxwe/so_my_brother_decided_to_announce_that_he_was_gay/ce69a5o) (random)
- ◆ [http://www.reddit.com/r/funny/comments/1tb0nm/and\\_of\\_course\\_scumbag\\_brain\\_does\\_it\\_every\\_time/ce69yno?context=3](http://www.reddit.com/r/funny/comments/1tb0nm/and_of_course_scumbag_brain_does_it_every_time/ce69yno?context=3) (relevant)

# Questions?