UCSD Confessions

Analysis

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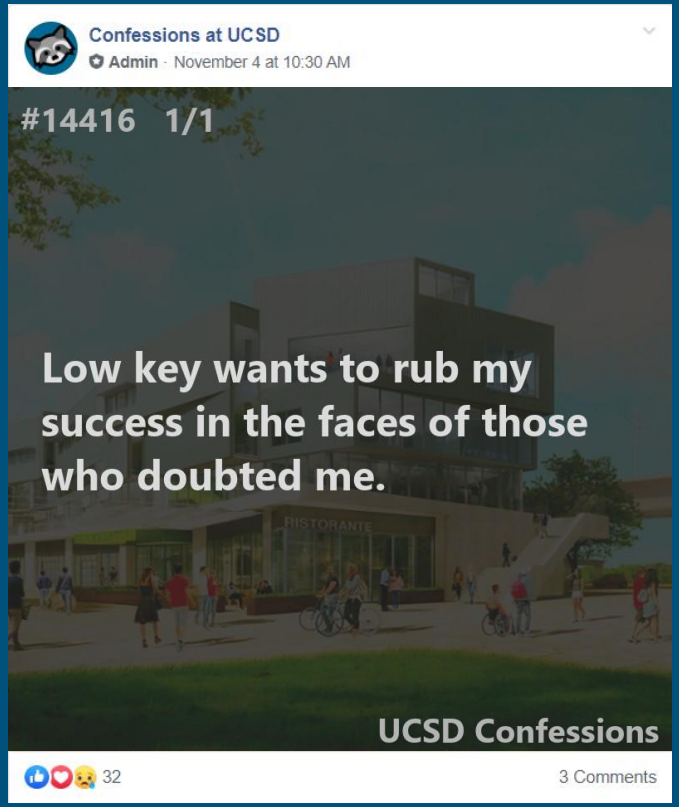
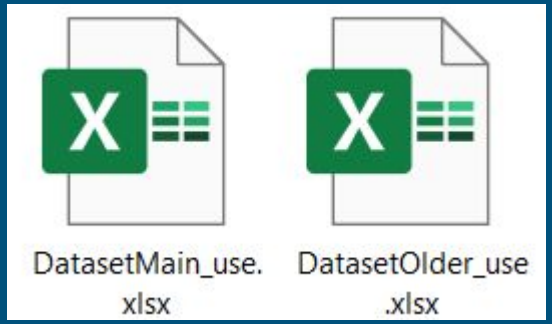
What is UCSD Confessions?

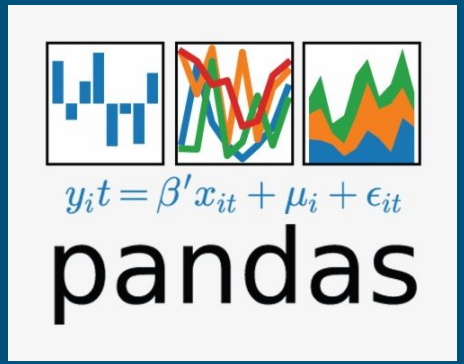


- Facebook Group: "**Confessions at UCSD Community**"
- For UCSD students
- Properties:
  - Anonymous submissions
  - Broad topics
  - Minimal Filtering

- **Good proxy for UCSD collective consciousness**

How to Collect dataset?





Problem: How to Collect dataset?

1. webscrape?
2. **ask the Admins!**

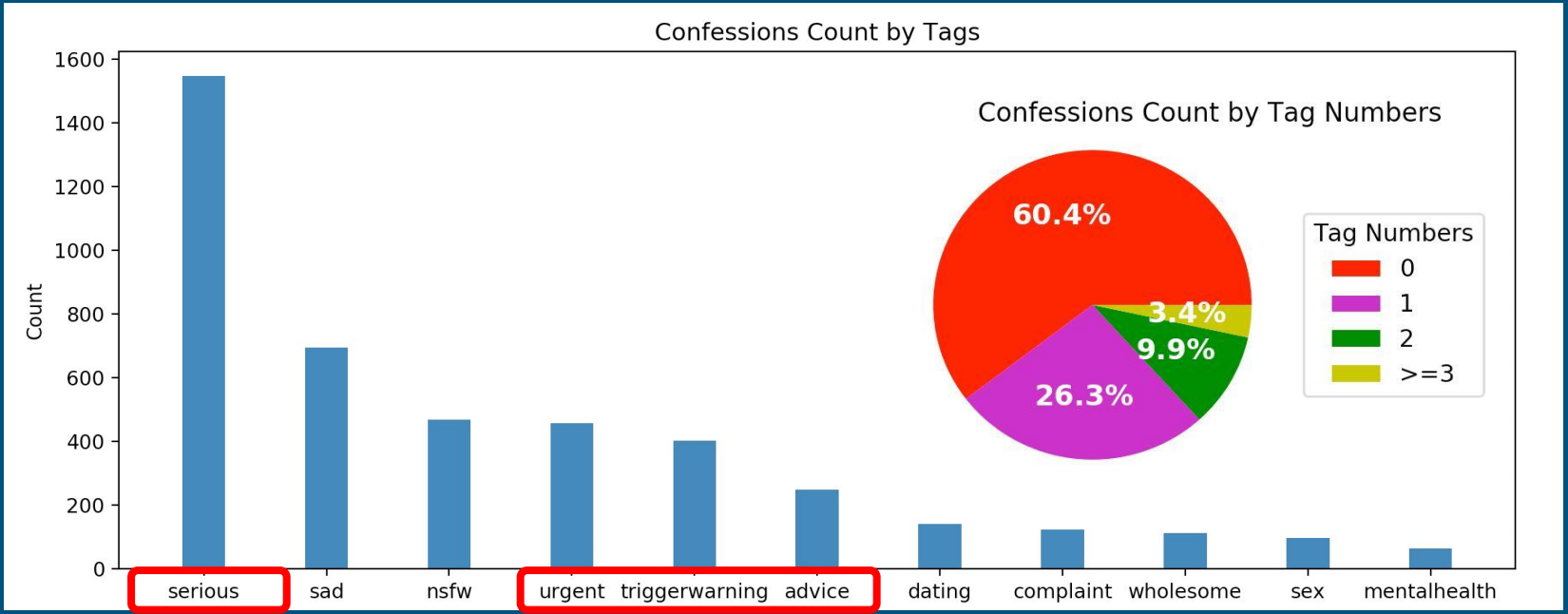
Procedure:

1. Download Excel sheets from Drive
2. Use Pandas DataFrames in Python
3. Do data analysis!

Using Big Data for Community Benefit

- Help the Admins organize confessions
- Tracking trends over time
  - Mental health, relationships, sleep, etc
- Help students plan events

Summary of Confessions Tags



- Tags are optional, self-reported
- Underutilized, arbitrary -> not useful

Sentiment Analysis Methods

Lexicon Scoring

- Polarity count
- Valence, Arousal, Dominance
- Valence Aware Sentiment Reasoner
- Emotion

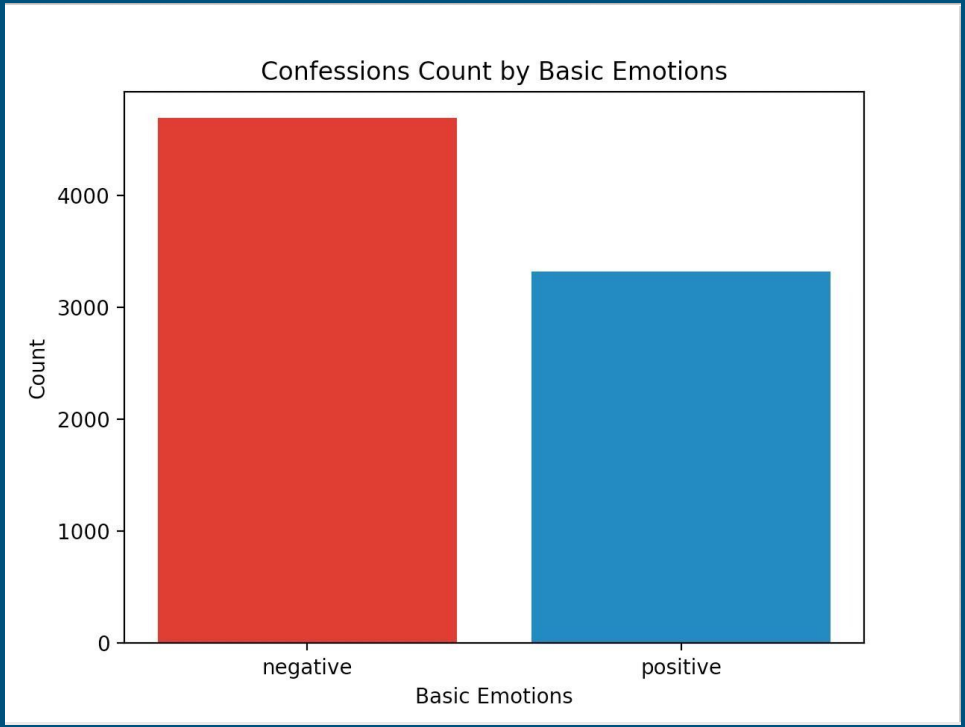
Word Embeddings

- Clustering
- Similarity Search

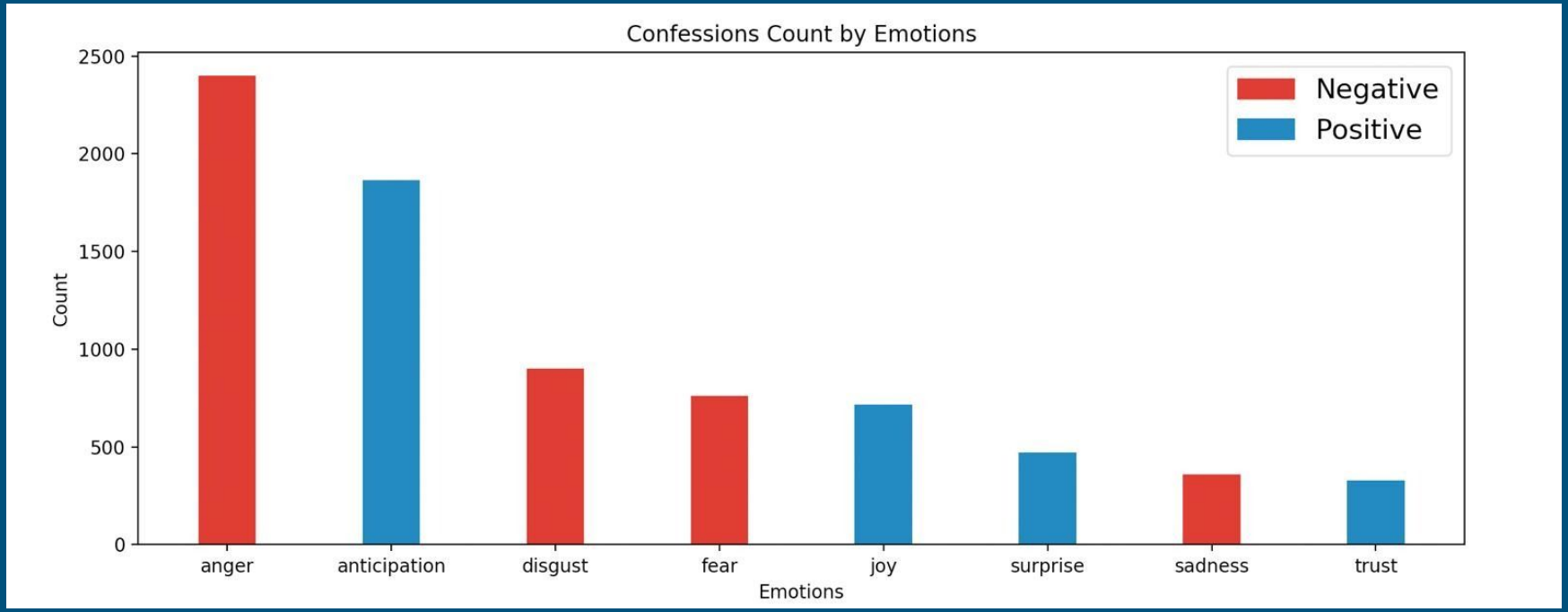
Tools: Nltk, Vader, Sklearn, Gensim, Word2Vec, WordCloud, Pandas, Numpy

Sources: http://saifmohammad.com/WebPages/lexicons.html

Confession Count: Positive vs. Negative

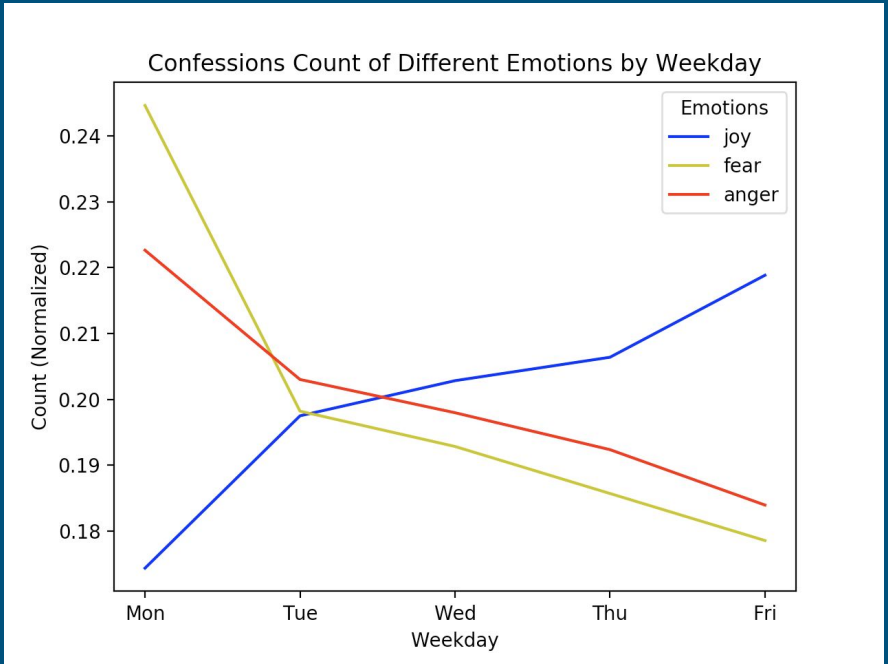


Confession Count: Emotion Category



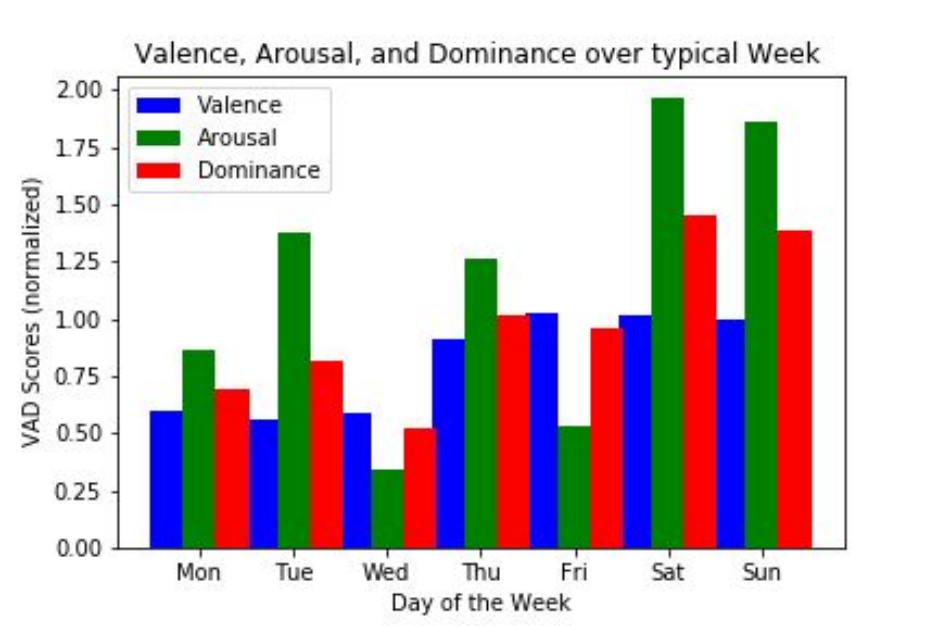
- Confessions are primarily classified with anger and anticipation

Emotion Classification across Weekdays



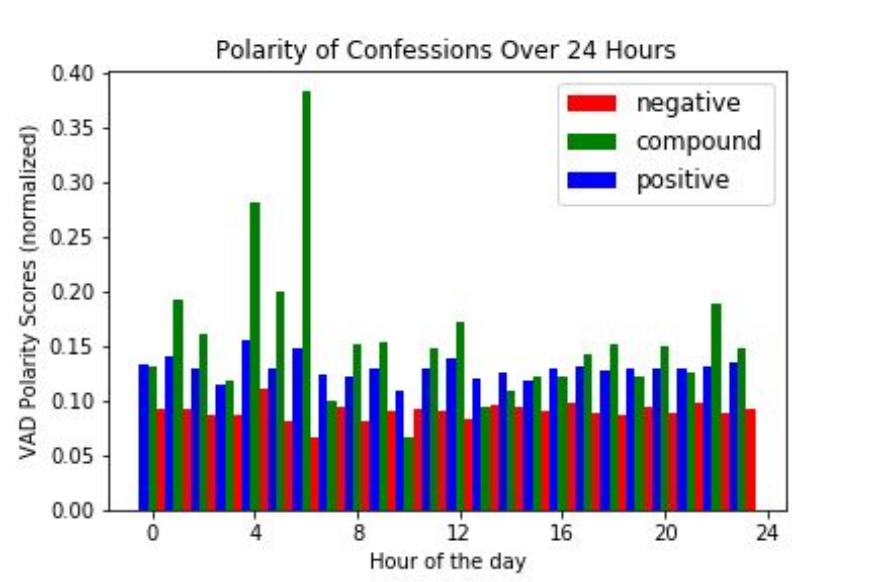
- Inverse relationship between positive and negative emotions over the week

Valence Arousal and Dominance



- Confessions are more excited and energized over Weekends!

“Valence Aware” Sentiment Reasoning



- Confessions posted in the early morning are more positive overall!

Binary Clusters with Valence Filtering

Positive

Negative

- Reasonable , interesting themes emerge!

Proof of Concept: Auto-Tagging

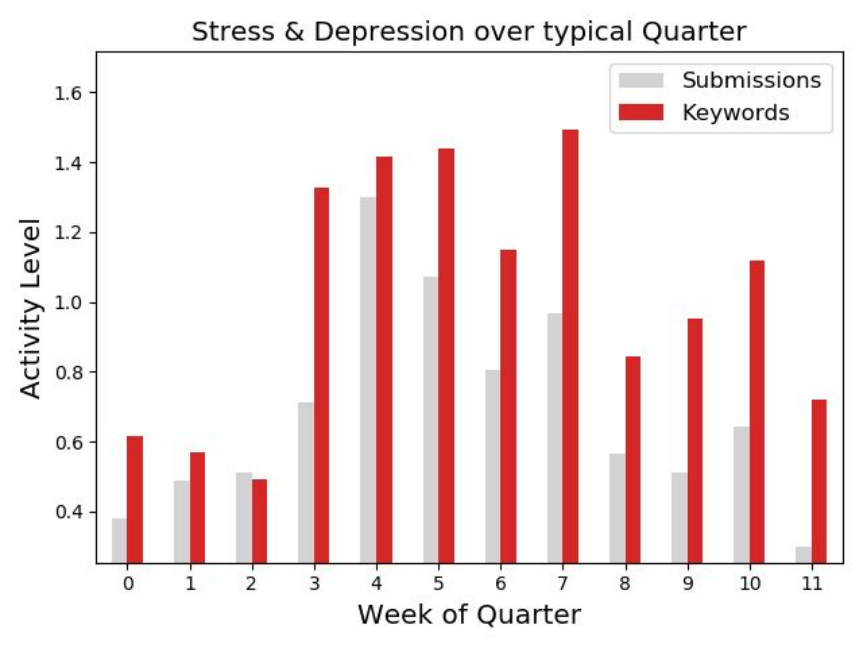
Use Word2Vec similarity thresholding to “suggest” possible tags (stressed, sad, relationship, school)

Example:
"I am having a really rough day, my girl just dumped with me, AND I failed an exam."

Result: “sad”

	stressed	sad	relationship	school
0	tbh	insecure	feeling	high
1	terrible	bad	now	classes
2	frustrated	awkward	fwb	college
3	anxious	alone	feelings	quarter
4	missing	depressed	ready	year
5	losing	feeling	lost	ucsd
6	accepted	uncomfortable	sex	gpa
7	caps	scared	having	beginning
8	struggling	worried	boyfriend	getting
9	rejected	afraid	connection	anxiety

When is UCSD stressed & depressed? 😫



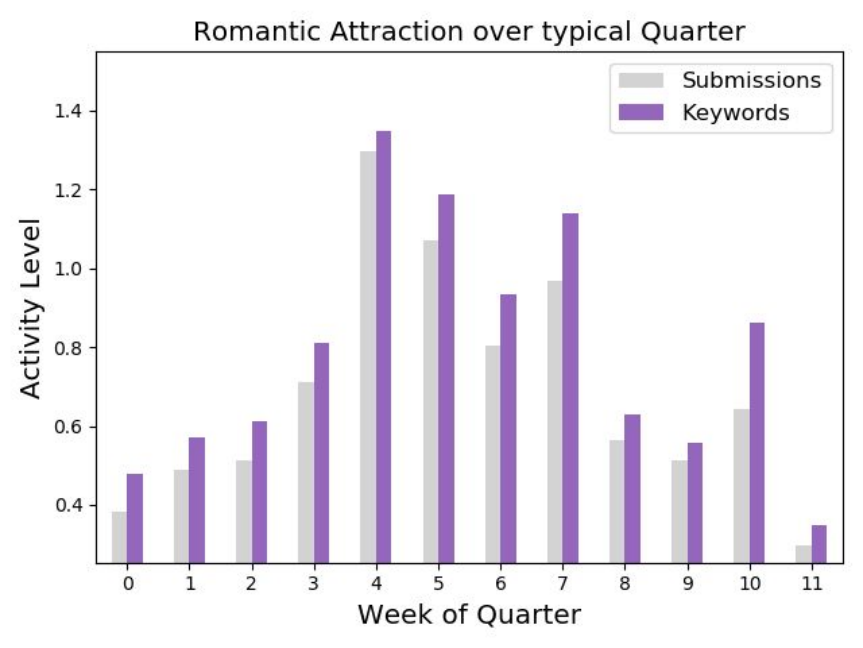
- <u>Midterm and Finals Season</u>
- Kicks in week 3
- Reduces a bit weeks 8-9

- **Best time** for destressor events:
  - **weeks 3 to 10**

*Activity Levels are normalized

Did you know? The Zone at UCSD offers destress events with Therapy Fluffies!

When does UCSD fall in love? 😍



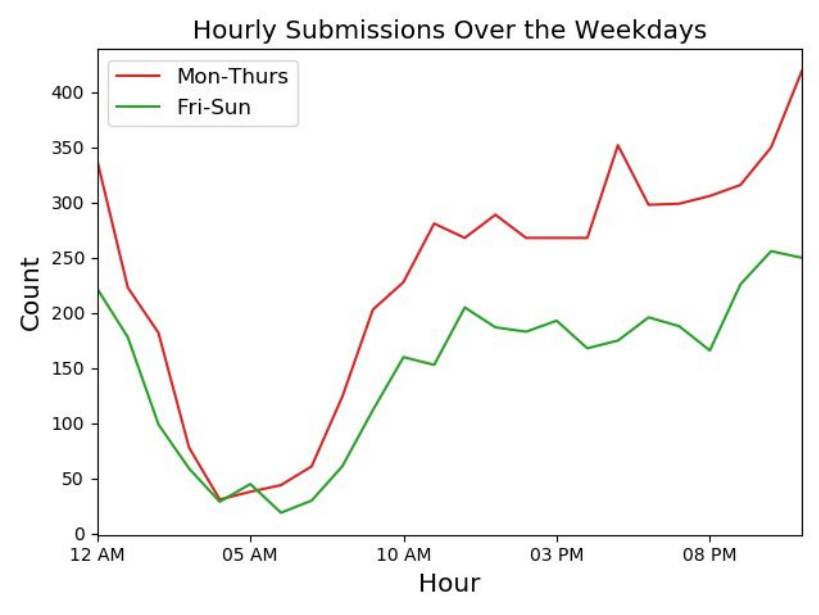
- Follows submission activity
- Possibly correlated with stress & depression

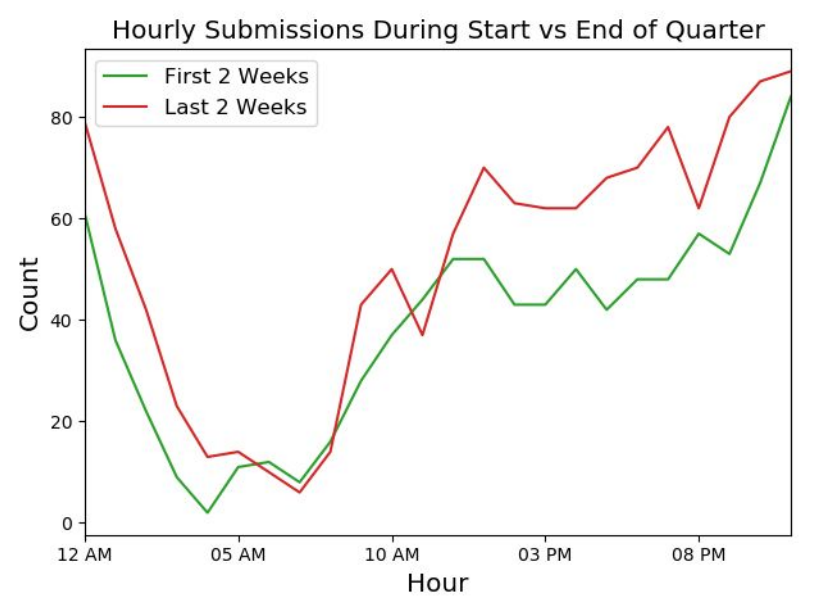
- **Most romantic weeks**:
  - **weeks 4-7 and 10**

*Activity Levels are normalized

Did you know? According to FB, 28% of married college graduates attended the same college.

When is UCSD asleep? 😴





- Overall, Tritons sleep at fairly consistent times.
- Slightly less on weekdays, later bedtime at end-of-quarter
- **Best time for events: 10AM to 11PM**

THANK YOU!

Did you know?
If 75% **fill out CAPE**, Prof. Unpingco will allow an alternate grading scale!

UCSD Confessions

ANALYSIS