

Charlie Mouton & Jennifer Wei

Software Design

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### Odd One Out!!!

1. For our project, we aimed to create a program that imports various people's newsfeeds from my friend's list and compares their similarities. We approached the task one step at a time, utilizing many functions to segment what we needed to accomplish to return the one person who was least similar to the others.
2. Our code pulls the newsfeeds of specified friends using Pattern and then removes common facebook phrases such as "Charlie Mouton is now friends with Jennifer Wei." After that, we break the list of posts into a list of words, and conduct a normalized word count, keeping track of which words show up in each person's news feeds. We then perform cosine similarity on the resulting vectors and return the person with the least similarity to the others. To run our code, you would have to have installed Pattern. We use Pattern, numpy, and re, but numpy and re come with the basic Python setup. We use dictionaries and nested lists, leaning towards nested lists due to what was needed to keep track of our values.
3. We looked at various different groups of people, and found that in a group of Oliners, Charlie's mother stood as the "Odd One Out!" In a lot of different trials, Casey Alvarado seemed to be the Odd One Out over and over. After looking into this, we noticed that words such as 'my,' "people," "ecstatic," "hey," and "friends" are words that she for

some reason outnumbered everyone else a lot, leading her to have a much worse similarity overall. Playing with our code further could yield more interesting results, but it is after midnight.

4. We were able to get things done with both members of our team feeling like we significantly contributed to the final product. We spent the entirety of the project partner coding, mostly due to the fact that Charlie had git issues with merging and his Ubuntu eventually gave out completely. The fact that we could not get much work done individually did slightly affect the efficiency of our work, but we were able to make huge progress when we were both available. Jennifer spent the entire time at the keyboard, which was both a good and a bad thing because we were able to have consistent naming practices and style while not that great because Charlie didn't get as much syntax practice as she did, although he was over her shoulder the whole time to help debug and stuff. It wasn't a major issue overall. We had originally possibly envisioned a visual aid to assist the project, but it ended up being outside of our timeframe. Charlie sort of felt during the project that it seemed almost too simple, barring the bugs that we faced, but looking at the bigger picture, it was quite a hefty task that they accomplished together.