# **SWiT: Emoji Sentiment Annotation Guidelines**

# Overall goals

Noticing that people use the same emojis for different meanings under different contexts, especially on social media, our group aims to predict the potential meaning of an emoji given the context.

We are using a Kaggle dataset called <u>"Tweets With Emoji"</u> which compiled 20k tweets per 43 emojis. Among the 43 emojis from the dataset, we have selected three emojis to be annotated: (loudly crying face), (we face holding back tears), and (c) (smiling face with tear). Each of those emojis tend to be used in two contexts: (1) a negative context and (2) a positive context.

We preprocessed the dataset following the steps below:

- Removed irrelevant information like url and @user
- Removed any tweets that only contain the selected three emojis but no context, meaning tweets with the selected emojis with text and/or other emojis would be retained
  - For example, we removed tweets that look like this:
- Pre-populated ann files with emoji spans that should be annotated

Our group's plan is to collect tweets that contain the three emojis from the dataset and annotate the emojis according to the context. Using the annotated dataset, our group intends to design a machine learning model to predict the contextual meaning of the emojis on the training set.

#### Classification task

Your task as an annotator is to decide when an emoji span is used with positive sentiment and when it is used with negative sentiment. The only emojis that you will be labeling are , , and , and you will determine if that emoji is being used to express positive sentiment or negative sentiment using the context of the tweet. Click on pre-processed emoji spans and then select an attribute type: Positive, Negative, or Unconfident. Please leave a comment in the notes section if there are any comments that you would like to keep for yourself (e.g., a reminder for why you chose a certain attribute) or for us (e.g., explaining why the Unconfident was chosen). Don't overthink your annotations! Annotate based on your intuition in conjunction with the guidelines.

# **Attribute types**

We have three attribute types: Positive, Negative, and Unconfident.

We have highlighted emoji spans in our examples using the following key for clarity:

- Positive
- Negative
- Unconfident

Below you can find a description of each attribute type as well as positive and negative examples for each one along with a brief explanation.

#### **Positive**

Any emoji span that is expressing positive sentiment should be labeled as "Positive". Positive emotions include happiness, excitement, love, delight, affection, hope, satisfaction, humor, etc.

True Positive Examples (emoji spans that should be labeled as "Positive")

- Bro is so bad at trash talk, even he don't know what he's saying
  - This emoji is being used to express humor, so we would annotate it with the "Positive" attribute. Even though the user is saying negative things about another person, the emotion that the user seems to be expressing is humor, which would fall under positive sentiment.
- 🕹 💜 💜
  - Even though this example only includes emojis, you can use the surrounding emojis as context to determine the sentiment. In this case, hearts are typically used to convey love, so the emoji span would be labeled as "Positive".
- but there is happiness in our history  $\bigcirc$ 
  - This example should be labeled "Positive" because the user is expressing feelings of optimism (likely despite some amount of negative things happening in their history, shown by "but" at the beginning of the tweet). Even though the user is acknowledging some amount of negative events, the emoji seems to be expressing optimism and hope.

*True Negative Examples (emoji spans that should not be labeled as "Positive")* 

- Its ok. There is always a next time. End of year is approaching and you can do little baggies for them. I just ordered things from amazon and I will do baggies for my 5th graders and give to them for their graduation since I won't see some of them anymore
  - Even though the tweet starts off being positive, the emoji span is expressing
    negative sentiment because they are directly after the last sentence "I won't see
    some of them anymore", which is negative. Thus, we can label it as "Negative"
    rather than "Positive".
- New mutuals urgently needed <a href="#">人</a>
  - This emoji span should not be labeled as "Positive", and instead should be labeled as "Negative". The user is expressing a feeling of loneliness and a want for more online friends, so it would not be labeled as "Positive".
- i've been thinking of him since last night
  - This emoji span should not be labeled as "Positive", and should be labeled as "Unconfident" instead, because the user just as easily could be thinking of someone for a negative reason as for a positive reason.

### **Negative**

Any emoji span that is expressing negative sentiment should be labeled as "Negative". Negative emotions include sadness, pain, disgust, anger, despair, loneliness, nostalgia/missing something, self deprecating humor, etc.

True Positive Examples (emoji spans that should be labeled as "Negative")

- Its ok. There is always a next time. End of year is approaching and you can do little baggies for them. I just ordered things from amazon and I will do baggies for my 5th graders and give to them for their graduation since I won't see some of them anymore
  - The emoji span should be labeled as "Negative" because the sentiment that the emoji is expressing is negative. Even though the tweet itself starts off as positive (and arguably is mostly positive), the emojis are related to the fact that the user "won't see [their 5th graders] anymore", which the user is sad about.
- - The emoji span should be labeled as "Negative" because the user is expressing feeling lonely and wanting more online friends.
- Now they're fighting
  - The emoji span should be labeled as "Negative" because the fighting is usually considered to not a good thing, so we would expect the user to be expressing negative sentiment with this emoji.

*True Negative Examples (emoji spans that should not be labeled as "Negative")* 

- Bro is so bad at trash talk, even he don't know what he's saying
  - Even though the user is saying negative things about someone, the feeling that they are expressing with the emoji is humor, so this emoji span would not be labeled as "Negative", and instead would be labeled "Positive".
- I am going to cry 🥹
  - The emoji span's sentiment heavily depends on the context, and the context is not very clear from the tweet. Even though you might originally expect "I am going to cry" without an emoji attached to be negative, the emoji that it is used with makes it harder to assign a sentiment to it, since it is often used more positively than negatively. Since this tweet could just as easily be a reaction to a cute puppy video or a sad story, we can label the emoji span as "Unconfident".
- but there is happiness in our history 😢 💝
  - This emoji span should not be labeled as "Negative", and instead should be labeled "Positive", because it is generally expressing feelings of optimism and hope, likely despite some amount of negative events happening in the past. Even though the user is acknowledging that there have been both positive and negative events, the general sentiment of the emoji seems to be one of hope, so we can label it as "Positive".

#### Unconfident

This attribute should be used if it is extremely difficult to label the sentiment of an emoji span as either positive or negative or if you cannot understand the information in the tweet enough to make a judgment. For example, if the majority of the tweet is written in a language other than English and it does not provide enough information for the emoji span, you would use the "Unconfident" attribute. Additionally, if the tweet contains slang that you do not understand, and Googling does not give you any more insight, you would label the emoji span as "Unconfident". If there is simply not enough context to understand the tweet, you can also label it as "Unconfident". However, if you understand all information in the tweet and there is some amount of context, please pick whichever sentiment is closest to the one in the tweet from the Positive and Negative attributes. *Only choose Unconfident if you truly cannot choose between Positive and Negative*.

*True Positive Examples (emoji spans that should be labeled as "Unconfident")* 

- what
  - It is not very clear whether the sentiment is positive or negative because it depends on the context, so we can label it as "Unconfident".

- I am going to cry 🥹
  - O This emoji's sentiment heavily depends on what it is a reaction to, as the user could just as easily be crying from happy tears or sad tears, so we can label it with "Unconfident". The choice of emoji also makes this a harder choice because the emoji has a slight smile.
- i've been thinking of him since last night
  - This emoji span could just as easily be expressing positive sentiment or negative sentiment, as the user could be thinking of someone for a positive reason or a negative reason, so we'll label it as "Unconfident".

*True Negative Examples (emoji spans that should not be labeled as "Unconfident")* 

- I WANT TO CRY
  - Although this tweet could be about happy tears, it seems more likely that it is negative because of the choice of emoji coupled with crying usually being used in a negative way.
- 60 9 9 9
  - Even though this example only includes emojis, you can use the surrounding emojis as context to determine the sentiment. In this case, hearts are typically used to convey love, so it would be labeled "Positive" and not "Unconfident".
- Now they're fighting
  - The context in this example is enough to determine that this emoji is being used negatively, so it would be labeled as "Negative", and not "Unconfident".

More examples can be found in the <u>Additional Examples</u> section below.

#### **Note About Sarcasm**

If you are completely sure that a tweet is sarcastic (for example if it has a tone tag for sarcasm), consider that it is sarcastic in your annotation. For example, if you come across a tweet that says "I had a great day today /s", the sarcastic tone tag suggests that the tweet is not actually positive, and instead should be tagged as negative. However, if you are not completely confident that the tweet is sarcastic, do not consider the tweet to be sarcastic.

#### **Content Notes**

Since our data comes from Twitter, many of the tweets come from subcultures with language you might not recognize if you are not familiar with the subcultures. For example, there are many tweets that reference music artists (e.g., song titles and lyrics, names of K-pop idols), TV shows, movies, and sports. Please Google anything that you are not familiar with. We will provide a bit of background information and/or links for the subcultures that we are familiar with ourselves.

Many of the tweets contain incoherent strings of characters or typos. Please make your best judgment. If things are very unclear and prevent you from making a decision, feel free to Google terms that you do not understand, or if needed, use the "Unconfident" attribute and leave a note to let us know. Please bear in mind that some incoherent strings of characters might be contentful abbreviations. We have included some below for your reference, but please Google any strings that seem like they may be meaningful as they could potentially affect the sentiment of the tweet.

**WARNING:** Because the data comes from Twitter, there may be some tweets containing inappropriate or vulgar content. If you are not comfortable with annotating any of these such tweets, please skip the attribute labeling and leave a note to let us know.

## Several usages of the '@' character with examples from the dataset

- As a replacement for the word "username":
  - o someone took my old @ ????? I was gna change it back 😭
- As a replacement for the word "at", denoting temporal or locative information:
  - o h my gawd your spins @ 30 secs ♥♥♥♥
  - Reliving my prom dreams @ med prom next week 🥹 IYKYK
- As a replacement for the word "mention":
  - hey i actually Really need this. someone pls @ me if theyre selling thanks 🥹
- As a shorthand for "don't criticize/attack/come for me", which is used when someone says something they think may be a controversial opinion and may incite unwanted arguments:
  - o I don't like the original theme(don't @ me) but this. This hit right where it needs to 🕹
- As an alternative to the phrase "not me [action]", which is nearly synonymous with "I can't believe I [action]" with an undertone of embarrassment:
  - o not @ me seeing the reproductive organs in one brooch (1) (1)
  - (example without the @ character): not me spending \$100 online shopping at
     Sephora and remembering \*immediately\* after pressing "Place Order" that I had a gift card in my wallet :

### **Taylor Swift**

 Many of the tweets in this dataset reference Taylor Swift. Contextual topics include her relationship status (her breakup with Joe Alwyn) and her discography. It may be beneficial to familiarize yourself with the titles of her albums and be able to recognize famous lyrics from her songs.

## K-pop terminology

- Please keep in mind that many of the tweets mention idols' names, with the majority of them being in romanized Korean, and sometimes being abbreviations of the romanized name.
  - Ex. Park Jimin (from BTS) can be found abbreviated to PJM.
- There are also many other Korean words that have been romanized and used in English contexts, so it may be helpful to familiarize yourself with the contents of this <u>resource</u> or have it opened as you annotate to look through first before turning to Google. A few of the words that can be found in the resource are also referenced below.
- There are mentions of many K-pop groups in the dataset. Groups that mentioned often, abbreviations for the group name (if applicable), and the name of their fandom are as follows:
  - ATEEZ (ATZ) ATINY
  - o <u>BTS</u> (bangtan/tannies) ARMY
  - o BLACKPINK (BP) BLINK
  - ENHYPEN (enha) ENGENE
  - o EXO EXO-L/Eri
  - o GOT7 IGOT7/ahgase
  - o ITZY MIDZY
  - o NCT (neos) NCTzen/Czennie
    - NCT DOJAEJUNG (DJJ)
    - NCT DREAM (7DREAM, dreamies) DREAMzen
    - NCT 127
    - WayV Weishennie
  - o NMIXX NSWER
  - o Red Velvet (RV) ReVeLuv
  - <u>SEVENTEEN</u> (SVT) CARAT
  - STRAY KIDS (SKZ) STAY
  - o THE BOYZ (TBZ) The B/deobi
  - o TWICE ONCE
- Anti to hate
  - Can also be used as a noun to refer to a hater.
- **BG** boy group (an idol group made up of boys)
  - See the Miscellaneous section for another meaning.

- **Bias(es)** favorite member(s) in a group
- **bong** ('bong' means 'stick' in Korean) the name for the fan lightstick, which fans wave at concerts to show support
  - Ex. caratbong (SEVENTEEN's lightstick), nachimbong (STRAY KIDS's lightstick)
  - Often inserts the group name or fandom name before 'bong', but sometimes will have other words according to how the lightstick looks, which would be a phrase in romanized Korean.
- Comeback when a group releases another song/album
  - o Abbreviation: cb
- Crumbs minimal interaction between people that typically do not interact often
- fan abbreviation for fans from a certain country, where the prefix refers to the country
  - Ex. kfan (Korean fan), cfan (Chinese fan)
  - Similarly, you can find the country prefixes attach to fandom names, such as k-CARAT (Korean CARATs), i-ARMY (international ARMYs)
- **GG** girl group (an idol group made up of girls)
  - See the <u>Miscellaneous</u> section for another meaning.
- [TRAIT] line a combination of group members with a similar given trait
  - Ex. vocal line = all of the vocalists in the group, bias line = all the favorite members in the group
- [YEAR] liner a group of people who were all born in the same given year
  - Ex. 97 liner = a group of people who were all born in 1997
- Nugu (means 'who' in Korean) someone who is not very well-known/popular
  - This is mostly used as an insult.
- OT[NUMBER] (one true [NUMBER]) an ideal combination of members of the given number
  - Ex. BTS has 7 members, so fans may refer to the group as a whole as OT7. If someone does not support one of the members, they may say they are an OT6 fan.
  - Groups can lose members over time and still be active in the industry, so the number can be used to reference when the group had that number of members.
- **Photocard** a collectable card with an idol's picture on it
  - Abbreviations: pc, poca
- Selca ("self camera") a selfie
  - A "selca day" is a day when fans upload a selfie along with a picture of their bias
- Solo fan/stan someone who is a fan/stan of only one member of a group
  - See the Miscellaneous section for 'stan'.
- **Ult(s)** absolute favorite
  - Ex. ult group = absolute favorite group, ult bias = absolute favorite bias

### Miscellaneous

- BG background
  - See the <u>K-pop terminology</u> section for another meaning.
- **D-word** censored version of 'die'
- Filo abbreviation for Filipino often used to refer to Filipino fans within a fanbase
  - Ex. filozen = Filipino NCTzen, filo moots = Filipino mutuals
- **GG** good game
  - See the K-pop terminology section for another meaning.
- IJBOL abbreviation for "I just burst out laughing"
- IYKYK abbreviation for "if you know, you know"
- **K-word** censored version of 'kill'
- Mutual someone who follows you and you also follow them
  - Abbreviation: moot
- **Oomf/oomfie** one of my friends/followers
  - Can be used in similar instances as *mutual*.
- Pull to try to obtain something through random chance
  - Can also be used as a noun to refer to what is obtained through *pulling*.
  - Contexts used: K-pop photocards, video games (typically those that are gachas)
- Stan to be an extreme fan of someone
  - Can also be used as a noun to refer to someone who is an extreme fan of someone.
- TOH The Owl House, an animated Disney series
- **Tone tags** used to indicate the tone of a message, formatted as a forward slash followed by a certain set of characters
  - Common tone tags include: /j (joking), /srs (serious), /g or /gen (genuine question), /hj (half-joking), /s or /sarc (sarcastic/sarcasm), /nsrs (not serious)
  - If you come across an unfamiliar tone tag, please reference this link for a comprehensive list of tone tags.

# **Additional Examples**

#### **Positive**

- GOOD MORNING TO ME 😭 😭 I LOVE HIM SO MUCH HE IS SO FUNNY
  - The emoji span is being used to indicate crying but from laughter, therefore we can label it as "Positive".
  - ★ If the emoji appears in a sequence containing multiple emojis, the whole sequence is annotated together.
- Such a beautiful track, so proud of this one
  - The emoji span is being used to indicate crying but from happiness and from the beauty of the track, therefore we can label it as "Positive".
- Came home after a 12h shift to a signed ateez album 🥹
  - The emoji span is being used to indicate happiness/gratitude from receiving something they enjoy (signed ATEEZ album), therefore we can label it as "Positive".

### **Negative**

- Im always get sick when im about to see my god daughters []
  - The emoji span is being used to indicate crying because the speaker is unable to see their god daughters due to their sickness, therefore we can label it as "Negative".
- It hurts to say Kung Fu Panda over Shrek 🕑
  - The emoji span is being used to indicate a reluctant, sad acceptance of an opinion, which is that Kung Fu Panda is better than Shrek. It hurts them to say it, therefore we can label it as "Negative".
- 8 more days of this suffering 😂
  - The emoji span is being used in a sad way, likely to indicate that the speaker is holding back tears due to their suffering, therefore we can label it as "Negative".
- - There are multiple emoji spans in this tweet, and while there are only other emojis serving as the context, it is clear that the overall sentiment is sad, therefore we can label them all as "Negative".

#### Unconfident

- 全然無理だったー
  - The emoji span is used in a non-English context, therefore it is appropriate to label it as "Unconfident".
  - ★ Annotate the emoji span with the "Unconfident" attribute if it is in a non-English context.
- só piora
  - The emoji span is used in a non-English context, therefore it is appropriate to label it as "Unconfident".
- Why am I crying
  - The emoji span can be used in either a positive or negative way since the context could refer to happy or sad tears, therefore it is appropriate to label it as "Unconfident".

#### More than one attribute

- We really are the true Taylor Nation pls let this not be true place.
  - The first emoji span is being used to indicate crying from happiness because the speaker is happy that they are in a niche in-group, therefore we can label it as "Positive".
  - The second emoji span is being used to indicate crying because they do not want bad news to be true, therefore we can label it as "Negative".
  - ★ Separate emoji spans can have different attributes.
- Weh asal semua trend dgn teme ni? Dont need those other lovers when i got my number one
  - The first emoji span is used in a non-English context, therefore it is appropriate to label it as "Unconfident".
  - The second emoji span is used to indicate a sense of satisfaction, therefore it can be labeled as "Positive".
  - ★ If code-switching occurs within the tweet, annotate the emoji span used in a non-English context with the "Unconfident" attribute, and annotate the emoji span using either the "Positive" or "Negative" attributes if the context is in English and can be understood.

- Eidrees is almost 8 months old 🥹 Why is he growing so fast 🥹
  - The first emoji span is used to indicate that the speaker is holding back tears of joy from seeing a child grow up, therefore we can label it as "Positive".
  - The second emoji span is used to indicate that the speaker is sad because they think that the child is growing too fast, therefore we can label it as "Negative".
- this gonna be my first album 🥹 still cant look at my credit card bill tho 🥹
  - The first emoji span is used to indicate that the speaker is holding back tears and about to cry from happiness because their very first album is going to be released, therefore we can label it as "Positive".
  - The second emoji span is used to indicate that the speaker is sad and about to cry because of their egregious credit card bill, therefore we can label it as "Negative".