

AMENDED Exhibit 820

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation

9/1/2016, 2:36 PM UTC

Labels

type: document

Quip

User Profile: Use Bitmoji Data to Infer Snapchat User Gender

Project Overview

We currently infer a user's gender from their first name (using a Latin languages name library). This has proven to be 60-90% accurate (varies by country and language).

Gender is one of our strongest user profile attributes — used for content and ad ranking, suggestions, targeting, optimization. We want to improve the quality of that signal by taking the user's given Bitmoji gender as the source of truth in cases where a Snapchat and a Bitmoji account are linked.

Project Goals

- Improve accuracy of gender for linked Snapchat + Bitmoji users
 - Thereby improve services that are approved to use user gender such as content, search, and ad ranking, suggestions, targeting, optimization
- Improve gender inference for Snapchat users who are not Bitmoji linked using linked-users as training data
 - Our data science team will research which names are most problematic for gender inference, what other signals correlate strongly to gender (e.g. content viewership), and potential remedies to improve our current system

Note: This spec covers the use of Bitmoji data for users who have a linked Snapchat account, not users who do not have a linked account.

Product Type

Targeting

Owners

Table1

	Department	Reviewer	Date
1	Engineering		
2	Business	Joshua Siegel	
3	Design	N/A	

Privacy & Security Review

*This Section must be completed

- Does the new product, application, feature, or initiative involve a new use of User Data?
 - Yes, this involves a user's linked Bitmoji avatar metadata
- User Data details
 - What User Data is needed for this feature? (Please be specific)
 - Access to the Bitstrips database to retrieve the following for users with an Avatar:
 - user_id: bitmoji_user_id
- bistrrips.snapchat_users.bitmoji_linkage_id: when a user links with a Snapchat account, UID
- gender: inferred by bitmoji when designing the avatar, MALE or FEMALE
 - *Note: The bitmoji's avatar gender is the only explicit, new piece of data that will be added to the user profile for this feature.*
- How will the User Data be used?
 - Improve the accuracy of gender for linked Snapchat + Bitmoji users
- Improve gender inference for Snapchat users who are not Bitmoji linked using linked-users as training data
 - Who outside of Snapchat will the User Data be disclosed to?
 - Nobody except the user, e.g. in the "Download My Data" tool
 - If a copy of the User Data will be saved and stored in a separate repository outside of Google, please describe where the user data will be stored, and when and how will that copy be deleted?
 - N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
 - Yes

Table2

	Approver	Status	Date	Notes
1	[REDACTED] (Legal)	Approved	9/26/2016	
2	[REDACTED] (Engineering)	Approved	9/26/2016	

Product Specific Review

*Please only answer the questions that are specific to your feature

3V/Geofilters

- Will this feature include a form of advertising other than 3V or Geofilter? If yes, please explain.
 - No
- Will this feature present ads in new parts of our App or in/on a different platform?
 - No
- Will this require presenting ads in a new geographic area?
 - No

Content (Includes Live Stories and Discover)

- Will the feature include Discover content (including Snap Channel content)?
 - No
- Will the feature use images, likenesses, videos, photos, quoted text, brand names, or other art?
 - No
- How long will the content be available?
 - N/A
- Will the feature include any music or sound effects?
 - N/A

Detailed Spec

The engineering team will build a process to export Bitstrips data (in AWS Redshift) into a Snapchat BigQuery database in the sc-targeting-measurement project. From there, a job will process matched users and add the Bitmoji gender to each user's Snapchat profile (see [Ad Targeting: User Profile & API](#))

Metadata of User Profile: Use Bitmoji Data to Infer Snapchat User Gender

Thread class

document

Created

2016-09-01T14:36:01+00:00

Updated

2020-03-12T22:55:22+00:00

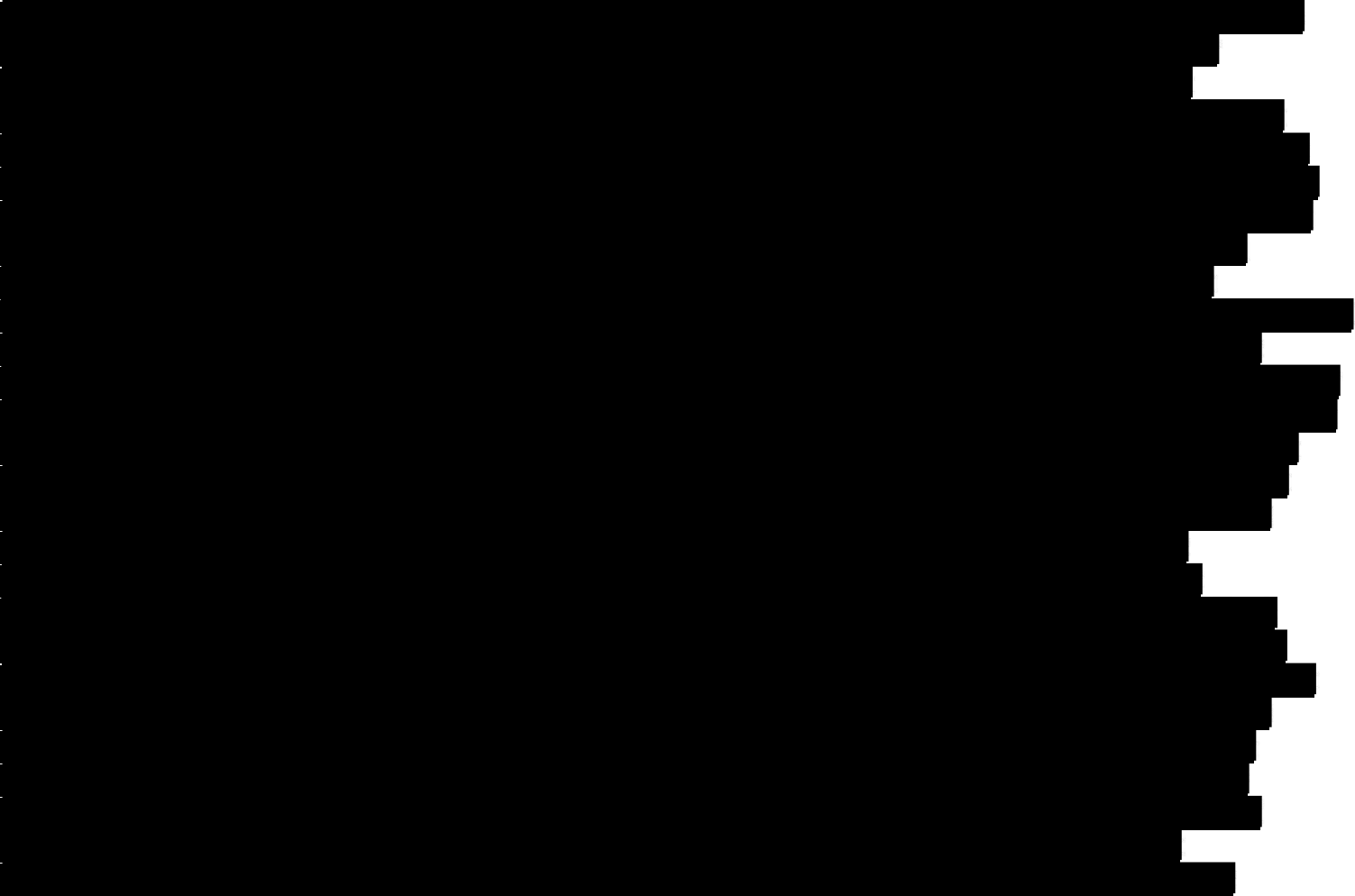
Link

<https://snapchat.quip.com/eYWYAhg6JgJH>

Shared folders

User Profile

Expanded users



[REDACTED]

[REDACTED]

[REDACTED]

Users

Josh Siegel, [REDACTED]

Urls

- <https://quip.com/dJBAEA1MbVL>
- <https://quip.com/DVJAEAxk6hp>
- <https://quip.com/PbNAEAba5Ce>
- <https://quip.com/MRXAEAkPXNp>
- <https://snapchat.quip.com/a0T5AxXgcUQp>

Chat

- Josh Siegel JS

[REDACTED] <https://quip.com/OaMAEAgoe6m>

Redacted--AC

Redacted--AC

9/1/2016, 3:20 PM UTC

- [REDACTED]

Josh Siegel we may have bitmoji/bitstrips users that have signed up and not linked with snapchat. doing a lookup on the email could get you more data enrichment

9/1/2016, 3:33 PM UTC

do you only want linked users?

linked users= ~35M

non linked users = ~67M

9/1/2016, 3:45 PM UTC

- Josh Siegel JS

[REDACTED] It would be good to explore how big that delta is, but that probably violates user expectations and pushes the limits of privacy policy. I think that's a discussion for later, if it's worth having. The case outlined in this doc sets a new precedent for how we share data between apps so I'd rather keep this spec really simple.

9/1/2016, 3:47 PM UTC

- [REDACTED]

alright only linked user it is then

9/1/2016, 3:49 PM UTC

- [REDACTED]

We can probably make this goal even more explicit: "Improve gender inference for Snapchat users that are not Bitmoji linked using linked-users as training data". 10m is a very strong seed to start from for a traditional classification problem.

9/1/2016, 4:27 PM UTC

I think it would be reasonable to disclose in DMD via two fields: "Declared Gender" "Inferred Gender". (Could do the same for age.) In many cases, "declared" will be unknown.

In this case I would just call it "bitmoji gender" if we were to do that, but I'm not sure what we expose in DMD today so maybe this is not needed

9/5/2016, 6:03 PM UTC

• [REDACTED]

I assume we'll find more signals to refine gender predictions, so rather than allowing them to proliferate by source (eg, "Bitmoji gender"), having one for predicted, and one for declared, might be simplest.

9/5/2016, 9:27 PM UTC

• Josh Siegel JS

updating to this, thanks [REDACTED]

9/14/2016, 5:34 AM UTC

Hey [REDACTED] - I can't find this field -- can you add the fully qualified / table name

9/14/2016, 6:05 AM UTC

[REDACTED]

9/19/2016, 4:53 AM UTC

• [REDACTED]

this exists in Bitstrips database. I'm not sure what the mapping is. need to ask someone in Identity

9/19/2016, 2:18 PM UTC

• [REDACTED]

Josh Siegel

Redacted--AC

Redacted--AC

9/20/2016, 11:44 PM UTC

• Josh Siegel JS

Redacted--AC

9/21/2016, 12:04 AM UTC

• [REDACTED]

Redacted--AC

9/26/2016, 11:47 PM UTC

Josh Siegel

Redacted--AC

9/26/2016, 11:49 PM UTC

• Josh Siegel JS

Redacted--AC

Redacted--AC

Redacted--AC

9/26/2016, 11:55 PM UTC

Edits

[REDACTED] edited at 2016-09-27T18:36:26.247Z

• Table2 updated

[REDACTED] edited at 2016-09-27T18:28:12.022Z

• Table2 updated

Josh Siegel edited at 2016-09-27T18:20:54.892Z

- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes, this involves a user's...
- .bitmoji_linkage_id: when a user links with a Snapchat account, UID
- gender: inferred by bitmoji when designing the avatar, MALE or FEMALE
- *Note: The bitmoji's avatar gender is the only explicit, new piece of data that will be added to the user profile for this feature.*
- How will the User Data be used?
- Improve the accuracy of gender for linked Snapchat + Bitmoji users
- Improve gender inference for Snapchat users...
- will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Yes

Josh Siegel edited at 2016-09-26T23:55:37.668Z

- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes, this involves a user's...
- for Snapchat users who are not Bitmoji linked using linked-users as training data
- Who outside of Snapchat will the User Data be disclosed to?
- Nobody except the user, e.g. in the "Download My Data" tool
- If a copy of the User Data will be saved and stored in a separate repository outside of Google, please describe where the user... will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Yes

██████████ edited at 2016-09-26T23:50:16.711Z

- Table2 updated

██████████ edited at 2016-09-20T23:43:34.291Z

██████████ edited at 2016-09-19T14:18:59.774Z

- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes, this involves a user's... avatar metadata
- User Data details
- What User Data is needed for this feature? (Please be specific)
- Access to the Bitstrips database to retrieve the following for users with an Avatar:
- user_id: bitmoji_user_id
- bistrrips.snapchat_users.bitmoji_linkage_id: when a user links with a Snapchat account, UID
- gender: inferred by bitmoji when designing the avatar, MALE or FEMALE...
- will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Yes

Josh Siegel edited at 2016-09-14T05:31:38.970Z

- ~~[WIP] User Profile: Use Linked Bitmoji to Infer Gender~~
- User Profile: Use Bitmoji Data to Infer Snapchat User Gender

- Improve accuracy of gender for linked Snapchat + Bitmoji users
- Thereby improve services that are approved to use user gender such as content, search, and ad ranking, suggestions, targeting, optimization
- Research how to improve accuracy of gender for Snapchat users that are not Bitmoji linked
- Improve gender inference for Snapchat users who are not Bitmoji linked using linked-users as training data
- Our data science team will research which names are most problematic for gender inference, what other signals correlate strongly to gender (e.g. content viewership), and potential remedies to improve our current system

• Note: This spec covers the use of Bitmoji data for users who have a linked Snapchat account, not users who do not have a linked account. Any use of this data outside the scope of this spec will go through a separate privacy review.

- Target GTM
- Q4 2016 (TBD)

- Table1 updated

- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes, this involves a user's linked Bitmoji avatar metadata.
- User Data details
- What User Data is needed for this feature? (Please be specific)
- Joshua Siegel and [REDACTED] to discuss and fill in
- Access to bitstrips the Bitstrips database to retrieve the following:
- user_id: bitmoji_user_id (optional)
- bitmoji_linkage_id: when a user links with a Snapchat account, UID
- gender: inferred by bitmoji when designing the avatar, MALE or FEMALE
- How will the User Data be used?
- Joshua Siegel and [REDACTED] to discuss and fill in
- Improve the accuracy of gender for linked Snapchat + Bitmoji users
- Improve gender inference for Snapchat users who are not Bitmoji linked using linked-users as training data
- Who outside of Snapchat will the User Data be disclosed to?
- Nobody except in cases where inferred gender is already reported
- If a copy of the User Data will be saved and stored in a separate repository outside of Google, please describe where the user... will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Yes

- Joshua Siegel and [REDACTED] to fill The engineering team will build a process to export Bitstrips data (in AWS Redshift) into a Snapchat BigQuery database in the sc-targeting-measurement project. From there, a job will process matched users and add the Bitmoji gender to each user's Snapchat profile (see Ad Targeting: User Profile & API)

- Query against bitstrips database:
- Export into a bigquery table
- —
- —
- —

Josh Siegel edited at 2016-09-08T23:10:00.171Z

- We currently infer a user's gender from their first name (using a Latin languages name library). This has proven to be 60-90% accurate (varies by country and language).

Josh Siegel edited at 2016-09-01T15:47:49.840Z

- Target GTM
- Q4 2016 (TBD)
- Privacy & Security Review *This Section must be completed
- *This Section must be completed
- ~~Product Specific Review~~ *Please only answer the questions that are specific to your feature
- *Please only answer the questions that are specific to your feature

██████████ edited at 2016-09-01T15:33:21.346Z

- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes, this involves a user's... metadata.
- User Data details
- What User Data is needed for this feature? (Please be specific)
- Joshua Siegel and ██████████ to discuss and fill in
- Access to bitstrips database to retrieve the following:
- user_id: bitmoji_user_id (optional)
- bitmoji_linkage_id: when a user links with a Snapchat account, UID
- gender: inferred by bitmoji when designing the avatar, MALE or FEMALE
- How will the User Data be used?
- Joshua Siegel and ██████████ to discuss and fill in
-
- Who outside of Snapchat will the User Data be disclosed to?
- Nobody except in cases where inferred gender is already reported
- If a copy... will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Yes
- Query against bitstrips database.
- Export into a bigquery table
-
-
-

Josh Siegel edited at 2016-09-01T14:53:45.801Z

- [WIP] User Profile: Use Linked Bitmoji to Infer Gender
- As gender Gender is one of our most valuable strongest user profile attributes — used for content and ad ranking, suggestions, targeting, optimization — we . We want to improve the quality of that signal by taking the user's given Bitmoji gender as the source of truth in cases where a Snapchat and a Bitmoji account are linked.
- Improve accuracy of gender inference for linked Snapchat + Bitmoji users
- Thereby improve services that are approved to use user gender such as content, search, and ad ranking, suggestions, targeting, optimization
- Improve
- Improving
- Research how to improve accuracy of gender for Snapchat users that are not Bitmoji linked

- Our data science team will research which names are most problematic for gender inference, what other signals correlate strongly to gender (e.g. content viewership), and potential remedies to improve our current system

• Note: This spec covers the collection, processing, and storage use of Bitmoji data for users who have a linked Snapchat account. Any use of this data only. Each applied use case outside the scope of this data spec will go through a separate privacy review.

• **Reference Documentation**

• ~~This effort builds on previous geolocation and ad targeting work:~~

- Ad Targeting: User Profile & API
- describes the infrastructure and access-controlled API to the user profile
- Geolocation Onload Request GeoCell Collection

- Table1 updated

- Does the new product, application, feature, or initiative involve a new use of User Data?

- Yes, this involves a user's linked Bitmoji avatar metadata.

- User Data details

- What User Data is needed for this feature? (Please be specific)

- This will not involve logging new data.

- This feature will convert existing app open location information i.e 'geocell' (see Geolocation Onload Request GeoCell Collection for details) into a coarser 'zip code' or 'postal code' for use Joshua Siegel and [REDACTED] to discuss and fill in the user-profile

- How will the User Data be used?

- To calculate the top geos (postal code + city) for each user. This process will look back at the last (rolling) 28 days of location data.

- Joshua Siegel and [REDACTED] to discuss and fill in

- Who outside of Snapchat will the User Data be disclosed to?

- No one

- Nobody except in cases where inferred gender is already reported

- If a copy of the User Data will be saved and stored in a separate repository outside of Google, please describe where the user... how will that copy be deleted?

- N/A

- Does this feature require a Privacy & Security Review? If No, please explain why.

- Yes

- Table2 updated

- Joshua Siegel and [REDACTED] to fill in

- ~~Calculate the top postal codes for each user based on where they most often open the app. This is limited to the top ten locations, as each location must account for more than 10% of a user's app opens in the lookback period (currently default is 28 days).~~

•

- ~~For users who don't have GPS enabled, we will need to rely on the user's IP address (when feasible) to lookup their postal code from Digital Element for IP Address to Geo Lookup and note the source of the location (IP or GPS).~~

- Appendix

- ~~Details of how this data will be sourced from our Geolocation Onload Request GeoCell Collection~~

- A daily job will compute will compute which snapchatter's are in which fence

- We will then deanonymize this data and make it available in a new shared Targeting dataset with 30 day retention for the targeting team to use.

- The data will contain the following fields

- user_id : The user_id

Josh Siegel edited at 2016-09-01T14:39:35.310Z

- User Profile: Use Linked Bitmoji to Infer Gender
- **Project Overview**
- We currently infer a user's gender from their first name (using a Latin languages name library). This has proven to be 60-90% accurate.
-
- As gender is one of our most valuable user profile attributes — used for content and ad ranking, suggestions, targeting, optimization — we want to improve the quality of that signal by taking the user's given Bitmoji gender as the source of truth in cases where a Snapchat and a Bitmoji account are linked.
- **Project Goals**
- Improve accuracy of gender inference for linked Snapchat + Bitmoji users
- Thereby improve services that are approved to use user gender such as content, search, and ad ranking, suggestions, targeting, optimization
- Improve
- Improving
- *Note: This spec covers the collection, processing, and storage of this data only. Each applied use case of this data will go through a separate privacy review.*
- **Reference Documentation**
- *This effort builds on previous geolocation and ad targeting work:*
- Ad Targeting: User Profile & API
- describes the infrastructure and access-controlled API to the user profile
- Geolocation Onload Request GeoCell Collection
- **Product Type**
- Targeting
- **Owners**
- Table1 updated
-
- Privacy & Security Review *This Section must be completed
- Does the new product, application, feature, or initiative involve a new use of User Data?
- Yes
- User Data details
- What User Data is needed for this feature? (Please be specific)
- This will not involve logging new data.
- This feature will convert existing app open location information i.e 'geocell' (see Geolocation Onload Request GeoCell Collection for details) into a coarser 'zip code' or 'postal code' for use in the user-profile
- How will the User Data be used?
- To calculate the top geos (postal code + city) for each user. This process will look back at the last (rolling) 28 days of location data.
- Who outside of Snapchat will the User Data be disclosed to?
- No one
- If a copy of the User Data will be saved and stored in a separate repository outside of Google, please describe where the user data will be stored, and when and how will that copy be deleted?
- N/A
- Does this feature require a Privacy & Security Review? If No, please explain why.
- Table2 updated
- **Product Specific Review** *Please only answer the questions that are specific to your feature

- **3V/Geofilters**

- Will this feature include a form of advertising other than 3V or Geofilter? If yes, please explain.
- No
- Will this feature present ads in new parts of our App or in/on a different platform?
- No
- Will this require presenting ads in a new geographic area?
- No

- **Content (Includes Live Stories and Discover)**

- Will the feature include Discover content (including Snap Channel content)?
- No
- Will the feature use images, likenesses, videos, photos, quoted text, brand names, or other art?
- No
- How long will the content be available?
- N/A
- Will the feature include any music or sound effects?
- N/A
- Detailed Spec
- Calculate the top postal codes for each user based on where they most often open the app. This is limited to the top ten locations, as each location must account for more than 10% of a user's app opens in the lookback period (currently default is 28 days).

-
- For users who don't have GPS enabled, we will need to rely on the user's IP address (when feasible) to lookup their postal code from Digital Element for IP Address to Geo Lookup and note the source of the location (IP or GPS).

- Appendix
- Details of how this data will be sourced from our Geolocation Onload Request GeoCell Collection

- A daily job will compute will compute which snapchatter's are in which fence
- We will then deanonymize this data and make it available in a new shared Targeting dataset with 30 day retention for the targeting team to use.
- The data will contain the following fields

- user_id : The user_id
- session_id : The user app session
- zip_code : The postal/zip code associated with the user during that session