



## FALL 2018 E-NEWSLETTER

At Digital Mountain we assist our clients with their computer forensics, e-discovery, and cybersecurity needs. For this E-Newsletter, we discuss memes and emojis and their impact on our industry.

### The Hunt for That Emoji

Your turn was coming, and you should have been prepared, right? Wasn't it just two months ago at that mixer that What's His Face from that other company was talking about it? Emojis as part of a complaint against his company? If only you could remember what he was saying about that vegetable emoji and what it meant. You resist the urge to call your high schooler and ask, because you're already *so not cool*. Staring at the email on your screen, you read it again. Well, you try to read it, but the combination of words and emojis might as well be Martian. So now what? Call someone from the IT Department and ask them? Can't do that, it's confidential at this point. Internet search? You could, but can you trust that your search results will provide accurate information? If only there was a way to search for emojis and emoticons that made it clear what they mean.



#### Why Is It so Hard to Search for an Emoji

Considering the popularity of emojis, the difficulty in searching for them whether within a document or on the internet might seem strange. In the case of emoticons, the search is actually fairly easy. The difference is in the construction of the image. Emoticons are strings of keyboard strokes – by typing in a colon, a closed parenthesis, and an apostrophe, you can stick your tongue out like so: :)'. And, you can search for that string of characters easily with any character recognition software (like the "Find" function in MSWord).

Emojis are not so easily recognized as they are not keyboard strokes, but graphic images – little bits of artwork inserted via Unicode points. Unicode is a standardized system that assigns a unique number to every character for all keyboards in all languages – including emojis. Currently, the Unicode Consortium has assigned Unicode points, the name given to the unique numbers assigned to characters, to over 1,600 emojis. The Unicode Standard allows an iPhone user in America to send a message to a Galaxy Note user in Germany without a loss of data.

Will the message display identically on both screens? Probably not, as each platform is unique in various ways, however, if we were to pull up the “skeleton” of the message, the Unicode sent would be the Unicode received, emojis included. It seems counterintuitive then, considering the consistency of Unicode, that searching emojis would be difficult.

The problem is actually a little bit of a cart before the horse situation: in order to search for a character using the associated Unicode point, you have to know the specific point first. As an example, if you wanted to search for the lowercase letter “a”, you would need to know that its Unicode point is U+0061. On June 5, 2018, Version 11.0 of the Unicode Standard was released, with 137,374 characters, all with their own unique Unicode point.

Let’s say we’re searching a set of emails, and we’re not sure what, if any, emoji are in the emails. Maybe there’s a U+F19E (lobster), maybe there isn’t. Maybe there’s any one of over the 1,600 emojis with Unicode points, or maybe there isn’t. That’s a lot of searching, and if there’s a big data set to search, it’s an even greater challenge. Fortunately, eDiscovery firms like Digital Mountain are researching automated search tools that are compatible with emojis, should you need them found.

### **There’s a Site for That**

For those not ready to deep dive into the search for emojis via Unicode, Emojipedia.org might be the easiest and most complete website collection of emojis and their associated meanings. Emojipedia.org is an online directory/encyclopedia of emojis for 25 platforms, the current 11 versions of Unicode, and other emoji-related resources. Returning to our hypothetical unknown emoji in a corporate email above, typing a description of the emoji into the search bar should return enough information and associated links to add context to the emoji’s use. It’s important to remember however that emoji meanings vary in use depending on the context of the message, the intention of the sender, and the culture in which the emoji is being used. Emoji meanings are also constantly evolving, so it may be wise to check with various sources.

A particular benefit of Emojipedia.org is that the site is a convenient source for finding the various modifications that emojis experience from platform to platform. Some emoji vary extensively, and if you’d like to see an example of this effect, search the “cat face” emoji to see the variations.

### **There’s a Keyboard for That**

With the meteoric rise in the use of emojis, developers not only satisfy demands for more emojis, they also create keyboards to make adding emojis easier. Most mobile devices contain a preloaded emoji keyboard as part of the standard set of preloaded keyboard functions. If you have an Apple mobile device, standard keyboard settings include emoji suggestions along with predictive word suggestions if your device is set as “predictive.” (Settings:General:Keyboards) Apple’s default setting enables predictive typing, and if disabled, no words or emojis will be suggested. Other mobile devices vary, and it’s an easy function to check – open a messaging app and type some of the common emojis – dog, cat, smiley, for example. These keyboards are augmenting the proliferation of emoji usage in communication.

### **Not Lost in Translation**

There’s no question that emojis have already become enmeshed in modern communications, and that their use continues to expand. While their meanings evolve, we’ll need to continue expanding our own knowledge base. Fortunately, there are resources that compile emoji

meanings, and provide searchable databases to help us. Although frankly, high schoolers are probably just as adept at translating this new language as any website, if not the ones developing the new vocabulary.

Please direct questions and inquiries about cybersecurity, computer forensics and electronic discovery to [info@digitalmountain.com](mailto:info@digitalmountain.com).

## UPCOMING INDUSTRY EVENTS

### MASTERS CONFERENCE

Washington, DC: October 23-24, 2018

### THE SEDONA CONFERENCE WORKING GROUP ON ELECTRONIC DOCUMENT RETENTION & PRODUCTION (WG1) 2018 ANNUAL MEETING

Los Angeles, CA: October 25-26, 2018

### TODAY'S GENERAL COUNSEL, "THE EXCHANGE" EDISCOVERY

Houston, TX: November 1, 2018

### "THE EXCHANGE" DATA PRIVACY AND CYBERSECURITY FORUM

Washington, DC: November 1, 2018

### "THE EXCHANGE" DATA PRIVACY AND CYBERSECURITY FORUM

DALLAS, TX: November 1, 2018

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*Digital Mountain, Inc. Founder and CEO, Julie Lewis, will be presenting at various upcoming industry events. Please send requests for speaker or panel participation for her to [marketing@digitalmountain.com](mailto:marketing@digitalmountain.com).*

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