Privacy and Security in Online Social Networks
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Week - 1.3
Lecture - 03
Incidents

Welcome back, until now in the course, we have seen some logistics about the course what online social media is? What is the impact and numbers and some ways in which we can actually use this social media services and some examples of these social media services? What I will cover today is actually looking at some of the incidences, both positive and negative where social media has actually a played role.

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Here is a first one, as I have put in the slide, it happened in 2009. This is the first time ever social media service like Twitter was actually used for crisis management. Here is a tweet which actually jkrums, j k rums actually posted, which reads as, 'There is a plane in the Hudson. I am on the ferry going to pick up the people. Crazy'. Until then Twitter was basically used for conversations, basically used for saying what I am doing in life in the morning, that we are posting, 'Morning Monday', 'I am having coffee', 'I am traveling here' and things like that.

Whereas first time in 2009, jkrums actually posted this tweet, where when the US Airways flight landed in the Hudson river this post came out and before the first responders could reach, there was actually public, citizens who were actually helping in the situation. Therefore, Twitter and social media services have started being used in many different ways and I am going to talk to you about some examples, some incidences were social medias' played about positive and the negative role. In this case it is very positive because it helps in actually solving crisis and help in first responder.

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Here is an example, where in India there was a kid who is actually lost in a railway station and somebody took a picture of this kid with railway the police officer and in 20 minutes she was actually able to connect with her parents. The primary way by which it was done was actually the picture was posted on social media particularly tagging, mentioning the concern that I said earlier in my lecture mentioning the Indian railways minister and therefore this tweet got viral, this picture got viral and the kid was able to connect with her parents within 20 minutes.

Keeping some of these examples, particularly with missing child there has been also organization which has been started only to help finding out missing child and parents through social media. So, here is one example which is 'find your missing child' using only social media services, and this website actually provides lot of tips on how one can use these social media services to connect with children to find out the missing children.
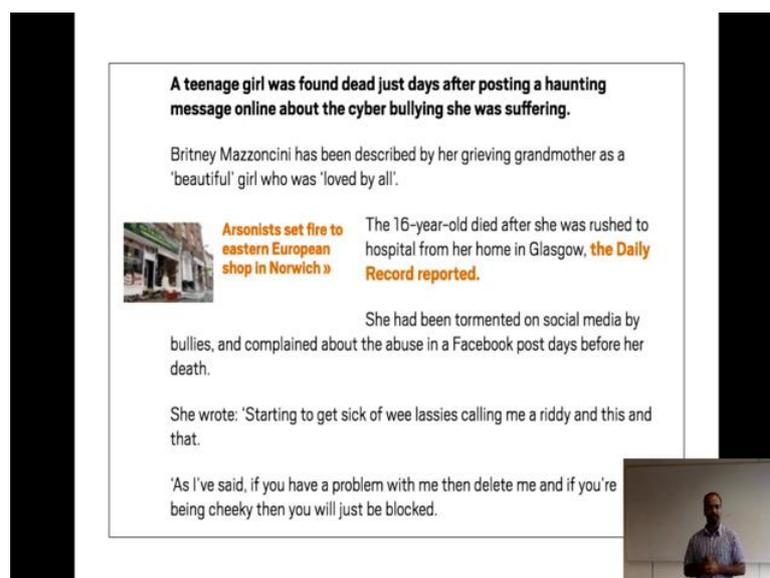
Now, here is another example where a teenager was found dead just days after posting a message on social media. So, this is more like a negative thing, where the girl posted

information on her Facebook account, where she was saying about, she is being bullied. Cyber bullying is one of the big problems on social media also. We will talk about it little later in the course, but because of the cyber bullying people have actually killed themselves and many a times they actually leave a message on their own social networks. In this case, she is being posting information about being cyber bullied done on Facebook, at the end of the day, she actually gives her life.

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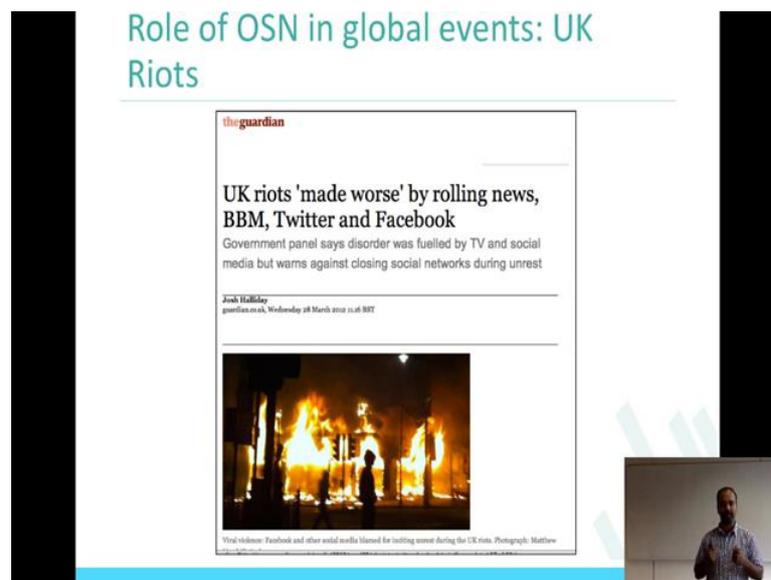
Also, in the world if you look at it when social media was started using, were being used for crisis, this is the first time when social media was actually used to create or to propagate an incident. In the 2009 Hudson River, it was actually used for solving a problem, whereas in this case UK riots made worse by rolling news on Twitter and Facebook. So, the messages were sent on Twitter or Facebook saying that lets go to this site in this street.

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There <mark>have</mark> been many incidences like this which you may have come across, where it is not that content on social media is talking about an incident that happens on in the real world, but these day social media itself as being used for organizing an event.

So in this example, if you see news articles which came of talking about 'Nepal earthquake: Government using social media to connect and provide relief'. Particularly in India, if you see there is lot <mark>more usage of</mark> social media for interacting with citizens and this is being done for the last at least a year or year and half, where it has become more, <mark>the</mark> social networks have proliferated the way that the government is organizing themselves and interacting with citizens.

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Another incident that happened in the world which also is something that, if you read about the effect of social media, this incident would actually be one of the most phenomenal event that happened in terms of using social networks. So this was main social media that was used in this case was actually Twitter, where they were actually using twitter to connect with citizens giving them to one place and revolution happened because of using these social network where it went very viral through these services like Twitter and Facebook.

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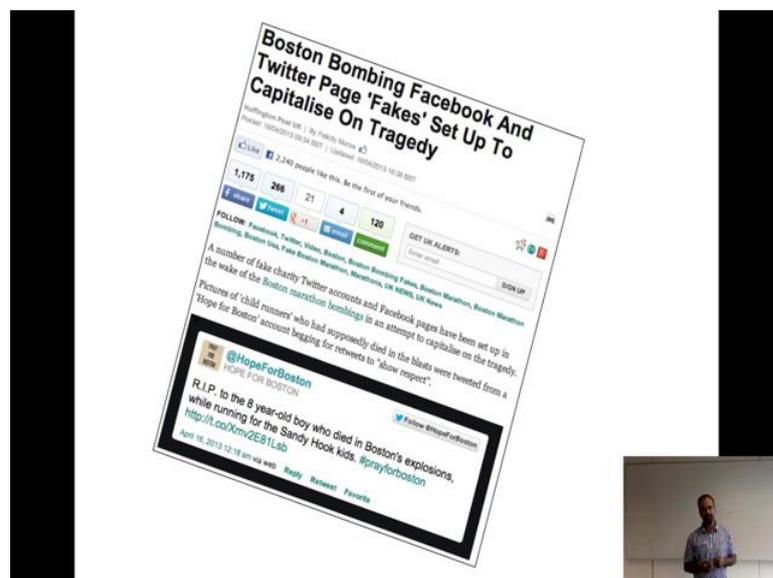
It is not only that social media services are being used or misused in situations like the Egypt or situations like finding kids. There is also a lot of misinformation that are actually floating around on social media services, for example, in this case Boston Bombing that happened, there was a tweet which said that, 'RIP to the 8 year old boy who died in Boston's explosions, while running for the Sandy Hook kids'. There was no 8 year old kid, who was actually participating in the Boston marathon. There was also another tweet during this Boston marathon said that, please RT this tweet, which is retweet this tweet, we will actually pay 1 dollars to Boston marathon. There was no money that was actually transferred to Boston marathon and this tweet get retweeted many many times, the Boston the RT tweet got retweeted more than few thousand times in couple of hours.

So, studying this misinformation is one of the main focus on this course. Also we talked about cyber bullying, cyber bullying will come back again the course. We also talked about incidences like these incidences, like Egypt revolution. We will look at these kind of incidences later in the course where we can collect data for these incidences and do some analysis around it. I also mentioned about how Indian government is using social media for their interactions with citizens. A specific module in the course we will also study about how police organization are actually using social networks to interact with citizens.

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Here is another problem. Now, it is not about only this fake content, it is not only about the cyber bullying content that are being posted on social networks. Here is The Associated Press, which is a verified account; verified account means it is legitimate and it is actually associated trust, twitter actually verifies the account if you are a celebrity, if you have lot more followers and if you are actually a marketing company which can pay for it, you can actually get your accounts verified. In this case, if you see The Associated Press is actually posting this tweet called, 'Breaking: Two explosions in the white house and Barack Obama is injured'.

I am sure you already understand the implications of this specific tweet. This tweet is verified and therefore, people thought that it is a legitimate post, but unfortunately this account was compromised, for a little bit of the time and that is when this post was done. Therefore, it is not only that the contents that are posted are not credible, but you can also have these problems like compromised accounts. So, I am just enumerating different, using these examples and what I am trying to do is to enumerate the different problems that happen on social media.

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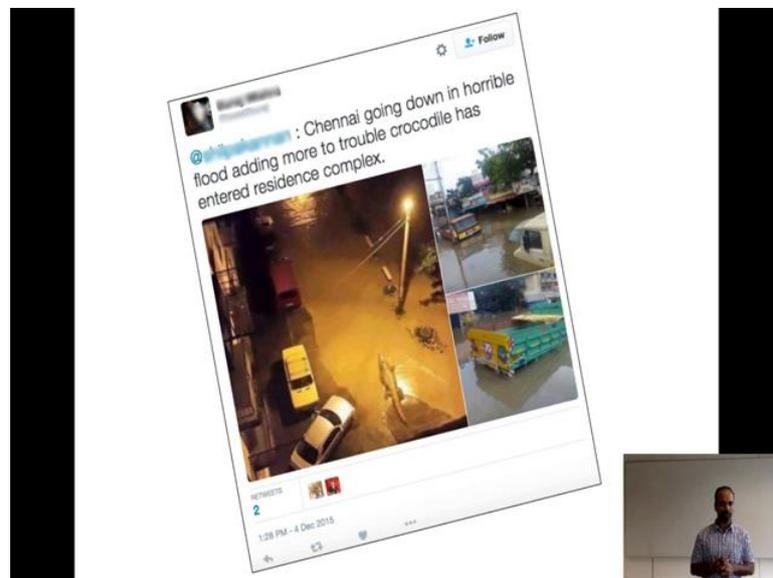
Also here is another one that I was also following very closely. This is Chennai floods November-December 2015 and when the floods happen there was a lot of uproar about one of these pictures, which is crocodile on the streets and there is no crocodile, there is no alligator on streets. So, this is another way by which actually such mis-information is

being spread and there have been incidences in the past where hurricane sandy in the US, where they had a picture with the shark in the water and this is crocodile in the water in the street in Chennai.

So, these kind of problems which is not only the text problem, there is also with the image problem where in the fake images are being posted on social media which become viral which also has impact in the society.

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So, here is another interesting problem that happened about a year or two years back. Robin Williams, when he passed away, there was a good bye message for him, which looked as he actually posted this video on Facebook, but this was actually a fake video, it was not a video that was taken before his death. So, situations like these, which are floods, incidences like these to death to Robin Williams, Boston marathon blast, people use these situations to create malicious content, content that is not credible on social media. So, this is another problem which we will actually study in detail.

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So, this is again example, that I talked few seconds back which is the three images in this slide. The one on the left which is McDonalds the tweet, which is 'McDonalds in Virginia beach flooded, which is actually a picture of McDonalds, but it was not taken from Virginia beach, it is actually taken somewhere else in the other part of the world few years before and the image in the middle is the image that I will talk about, which looks like a shark in the water, while the hurricane sandy was going on and the third image on the right hand top is actually the image from a movie which was used to say that is how it looks now, when this hurricane is going on. So, all these are fake images, but they were all used in an incident like hurricane sandy to propagate malicious intent, to propagate these kinds of information which is not credible.

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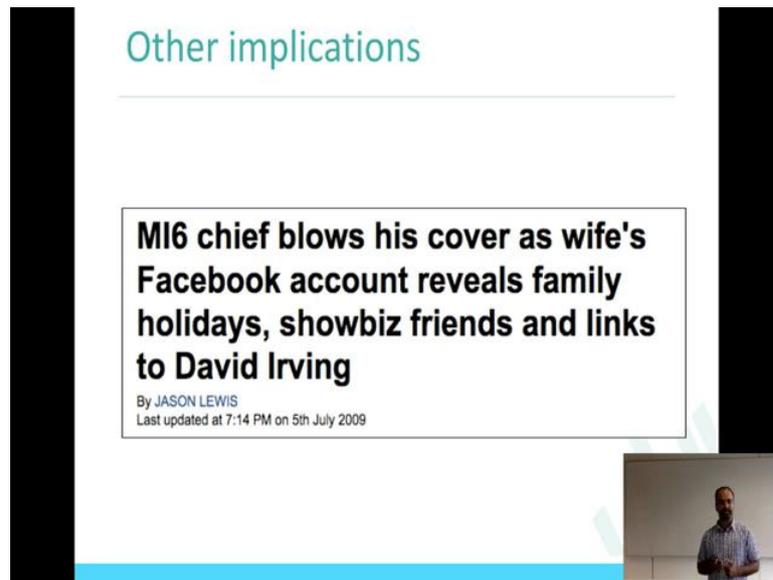
So, until now we saw some events that where having talking about malicious content, how people connect with government organizations, how these information can be actually used to reconnect with parents, and things like that, but here is an example which also happened couples of years, some years back which is MI6, which is military intelligence chief could not take his job because his wife actually posted some pictures on Facebook, which pictures also became public and the picture showed that this MI6 chief who was going to become a chief his being with some people whom he should not have been with.

Therefore, there is also a privacy issue which we will talk about which is how much information about people around you is getting revealed through these social networks. So, there is this whole idea of privacy the whole idea of using policing and online social networks, there is also credible information, misinformation on social network. So, this are the different topics as I said in one of my early lectures about the topics that we will cover.

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Now, let me talk to you about why Facebook id knowing what through your Facebook is important because I can actually use the information, who you are and where you are from, things like that from your Facebook account and actually send relevant information to you and that is why Facebook, understanding Facebook account, understanding Facebook handle becomes such an important topic also which is personalization, which is understanding user behavior and things like that targetted advertisement and topics around it.

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A few more implications about social media also, if you look at this one where there are many people around the world who lost the job because they have been using Facebook and Twitter too much.

So, therefore, this implication which is about usage of social networks itself and organizations keeping track about what you are posting and there have been incidences also where people are posted employee of companies posted about projects they working on. They should not be talking about on social media and when these contents goes in hands of people whom they should not be looking and this information can actually be used against the company, the company actually takes very a strong thing around thing against the employee itself.

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Now, just wrapping up the week 1 content, what all we have done, we have done actually growth of online social media, which is how large it is? What is it? How much of contents is getting generated on 60 seconds something like that and we also looked at velocity, volume, variety, value and veracity. So, those are 5 V's that we talked about and in different social networks like Facebook, Twitter, Linkedin, Google plus, Whisper, Periscope, Tinder, these are the different social networks also we saw about. And now in this lecture I talked about some incidences that where social media is used for both positive and negative implications. So, this is the topics that we covered.

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We have also uploaded content on setting up your machine to use Linux and python, these are two tutorials that we have uploaded for this week. So, as I was saying in the first part of the introduction of the course we will actually have some hands-on tutorials over the semester. So, this will actually help you to get hands-on and in particularly some of things that we are going talking early in the course will help you actually to understand and do things by yourself.

As we move forward in the course, for example, you need to write Python code to collect the data from Twitter and Facebook, you will have to get yourself familiarized with that, it is not that the difficult the tutorials about 25 to 30 minutes together Linux and python. If you can set things up if you can understand little bit about, how to set up Linux and python and set it up as earlier as possible in a machine that you would have a access to which you can use it for the entire course time.

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And last two slides I had was, there is Facebook page that we have, the group which is Precog where we actually talk about lot of things that we going to be discussing in the course also, which is in this page many of things that we talk about or share is the things activities that are around the topics that I have actually have been talking about in this course and things that the students do and then if there is interesting, that happens on the topic,we would also share it here. So, I would highly recommend you to look at this page Precog dot IIIT-D on Facebook.

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It is very similar to the page, this is the website that we have actually maintain precog dot iiitd dot edu, this is a website where we actually collate all the information that the group, the work of the group that we do together. So, I highly recommend you to look at these two, Facebook page and this web page for any updates on this topics around if not only for this course, beyond this course also because I think it will always be good to have updated content or the latest contents on this topics.

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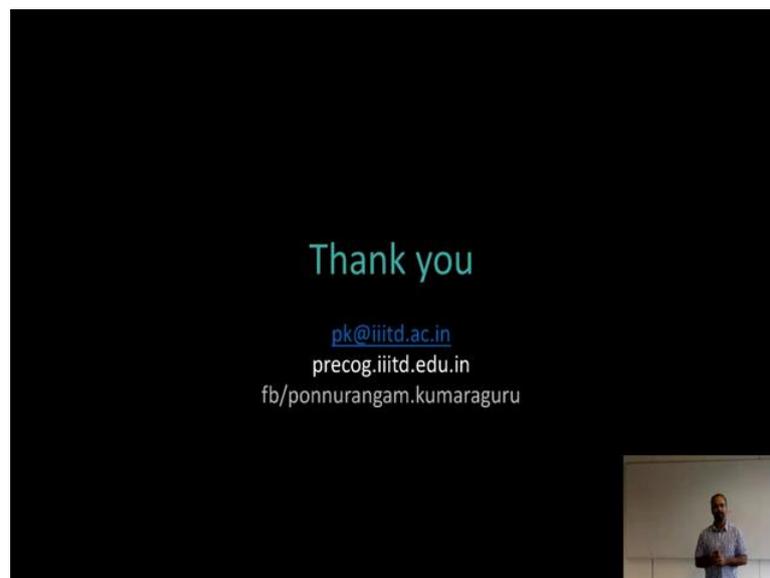
With that I will wrap this for week 1. So, what we will do is the week is, next week we will talk little bit about one of the topics that I covered very briefly with incidences today and we will also have some hands-on session tutorials also uploaded for next week. So, there will be also homework upload for week 1.

Please try to attempt it and if there are any questions, feel free to post it on the forum on NPTEL online course website and I'll be happy to actually answer some of them. If it is something that we could actually answer, you cannot be asking what is the answer to these questions. Therefore, I will sign-off from here and see you in the next lecture.