## Social media
ALGORITHM

How Social Media Algorthms
Alter Your Newsfeeds

Almost everyone is a social media addict these days, but despite being so deeply attached, still very few users know the technical aspects of how these mega platforms operate and how their algorithms work behind the scene to provide us with the best content in our newsfeeds. An average social media user is exposed to more than 1,500 stories each day, but barely 100 engaging and relevant posts end up on their newsfeed every day. Social media algorithms play a fundamental role in making it possible for the more important and higher quality content to show up on the average social media user's newsfeed, paving way for a greater user experience. In addition to user's having a more fulfilling time online, advertisers also benefit from their posts having more screen time on people's newsfeeds.

Social media algorithms work on the basis of unsupervised machine learning. Newsfeeds send our data to self-teaching neural networks to help them function like a human brain to help improve the content that we see every day. The algorithm collects and scans everything posted by your friends, the people you follow and all the pages you've liked, then the algorithm gives each post a relevancy score and the post with the highest score is more likely to end up at the top of your feed. Facebook's algorithm majorly relies on factors such as how often you interact with a post, how often you or others have hidden a post, and the level of engagement a page or post is getting. Instagram's algorithm takes into account your past interactions with the person who shares a post and the amount of likes and comments a post is receiving. Twitter's feed is based on the accounts you interact with the most and how many times something is being tweeted as a hashtag and is being retweeted, and, just like Facebook, it comes up with the top relevancy scores for each post.

Algorithms are the lifeline for social media networks and without these algorithms, social media networks could quite possibly lose the majority of their users due to bad user experience and marketers for fewer advertisements. ■
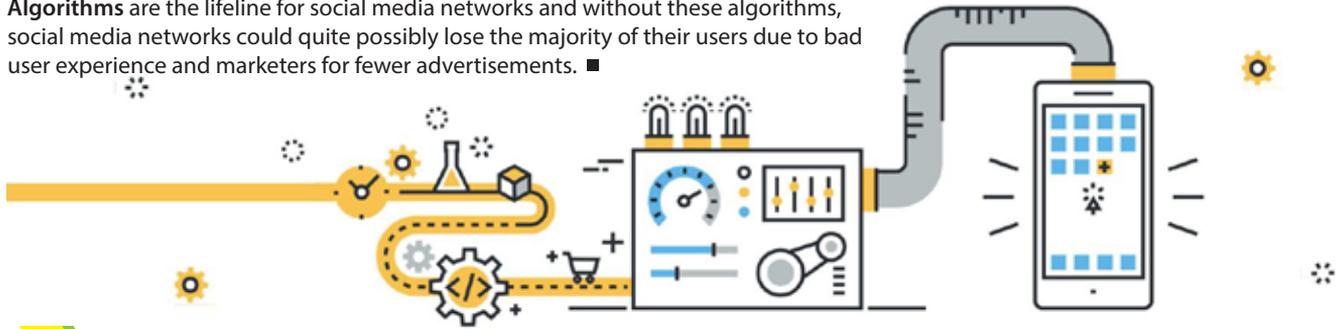
Why We Get Hacked
A Closer Look Into Securing Data

Today, in an age of artificial intelligence, the nightmare of being hacked and the disclosure of potentially sensitive data, like fingerprints, across the Internet has become incredibly challenging for people to avoid. Hacking first came about with a purpose to find solutions for technical glitches; however, more recently, it's typically being used to commit malicious activities. With this in mind, we can all prevent being hacked if we understand what it means to be bugged and how to handle sensitive data on the web.

Bugging and cyber-attacks have caused governmental and industrial sectors to be wary about the protection of their sensitive data so as to not disrupt the economic infrastructure. Most of our activities on the Internet are in the hands of enterprises that use our data for different purposes like database management, marketing, and advertising. Sometimes these third-party interferences cause huge security risks for our privacy. In recent affairs, CloudFare, a web infrastructure company, has been construed in the media for its severe security breaches on its websites, as well as in mobile apps that stem from a bug. It exposed users' sensitive information like passwords, API keys, cookies, and authentication tokens. This situation necessitated the execution of effective methods to stop third-party interference.

The presence of cyber thieves has made our online sensitive data less secure, but there are many ways to ensure our privacy. When we delete files of our hard drive or online servers, it doesn't mean the content is fully erased; it just means a copy still remains on the hard drive or server while a personal copy is gone and it could potentially end up resulting in a third-party breach. To make it harder for third-parties to gain access to our accounts, end-to-end encryption and hiding IP addresses can be helpful in securing our privacy.

Using browsers to handle our sensitive data might also be a concern for some, but there are browser extensions to help ease our minds of the dangers online. Some options for blocking third-party trackers are Privacy Badger and uBlock Origin, which generally secure online surfing. When online shopping, it's important to note which secure platforms the e-commerce site is using, whether it takes you to a more secure platform is crucial for those who are wary about giving out their credit card information.

Indeed, the world of digital mirrors has a lot of security strategies that seems hard to apply but we have no other option. Still, there is more effort required to fight for the privacy of online users as the Internet will continue to find new ways of interfering. ■

Skylite NETWORKS

Tech Wise

Battle of the Smartwatches

Today, the smartwatch industry is progressing rapidly as wearable gadgets are offering similar functions as smartphones. Since the invention of the smartwatch in 1972, the competition of the industry has constantly been rising with further advanced technology, now more than ever. With all the smartwatches on the market, there are a number of areas to be on the lookout for in terms of preferences, like features and compatibility with other smart products. There are features for everybody on a smartwatch, whether it be used for work, personal, or even while working out. It's just a matter of finding the right one for you and the apps to install for your everyday needs. Some features work continuously off smartphones as long as they're connected via Wi-Fi. Most have voice searches to quickly access information in a moment's notice. Of the top smartwatches on the market, Apple already has an already established market, but Android is releasing new updates frequently that are good enough to compete with Apple. With so many smartwatch options on the market, an easier way of considering which one is preferable for your lifestyle is to go by operating systems. Apple is considered one of the most trustworthy brands for phones, PCs, and tablets, so consumers expect a lot of their new products. Apple Watch not only gives you the smooth and continuous functions, but also has a luxurious look. Its water-resistance makes it more durable than any other smartwatch. Some may view this is as a downside, others may prefer it, but the Apple Watch only works with other Apple products, namely, the iPhone. Many other smartwatches use Android Wear and they have their own pros and cons with them. Just like with Android smartphones, customers have their choice of manufacturers to choose from when searching for an Android Wear smartwatch. Android Wear allows its users to customize their device to make it more user-friendly. A huge bonus with Android Wear is that they can be paired with both Androids and iPhones. With all the reasons to like one smartwatch more than another, it's difficult to decide who wins the battle and which one is going to lead as a boss in the smartwatch industry. Thankfully, it's not the end of the course as the best is yet to come. ■

What to Know About the Cloud

The modern technology is innovating with the speed of light. Shopping at malls was an old trend; new generation is interested in online shopping. So it's necessary to store data with only full security on online systems. Cloud computing is the only up-to-date technology that provides full support for this. Cloud computing means accessing and storing data or programs via the internet, and not on a hard drive. This technology has been successfully implemented for personal and business use to offer ease of use for everyone. Cloud computing can be labeled as time and space shrinking technology. It's taking over the world due to its unique and mind blowing specialties:

Flexibility: With a steady internet connection, users can access data from any smartphone or computer anywhere, anytime.

Disaster recovery: The immediate storage of data to an external cloud ensures users will not lose data in case of smartphone or computer crashing. It has been proven that businesses save money and time by backing up data.

Environmentally friendly: Cloud computing not only benefits the workplace, but also the environment. Processing data on a local server greatly increases carbon emissions while switching data to the cloud reduces carbon footprints.

Cloud computing is everywhere, from a personal to business basis. Everyone who uses the internet is accessing the cloud, such as using Gmail that completely depends on cloud to access information and using messaging apps like WhatsApp. Using clouds is preferable to taking up space on hard drives since it's more affordable to buy more cloud server space than it is to purchase larger hard drives. Even for businesses, cloud computing has helped secure money and time by moving their programs and data to the cloud. Not only does it offer less hassle with paper and money, but it's also more efficient with quick searches. The cloud computing industry has been on mission to change the old phase of data storing systems. Having unlimited access to personal data anywhere, at any time is a convenience that we can't live without anymore. Thankfully, we can begin storing all our data on a cloud server we trust the most and not worry about running out of space on our smartphones or computers anymore. ■

Fake News Epidemic

The pervasiveness of fake news is not new to us. However, in the past decade, the fake news epidemic has stretched its roots all around us, whether it's through social media or traditional news agencies. It has several adverse effects, as it not only creates chaos and panic, but also disturbs the psychology of the masses. The advent of the 21st century hastened the process of spreading fake news, owing to the advancement of communication along with the motive of standing ahead of others in the race of rating. The motive of the sources spreading this hoax is to make money and to influence the public opinion by bringing an exclusive breaking news, footage, or story which is either too exaggerated or intriguing in order to attract maximum audience who would then share among their followings, leading to a continuous flow of false information. The motives behind spreading false information is solely materialistic as it involves getting money, popularity, maximizing the audience, or ruining the image of any popular personality; yet it's effects are far reaching. This materialistic approach of people from the social, electronic, and print media has a deep impact on the political scenario too, as spreading fake news affects the values of democracy, along with global peace and security, as it's used as a way to present opposition in a negative way. Barack Obama describes the effect on the political scenario saying, "it's a media ecosystem where 'everything is true and nothing is true.'" Moreover, on 2nd March 2017, Russia's Foreign Ministry spokeswoman criticized the US media on the charges of accusing and judging by fabricating the false information.Under such crucial circumstances, when indeed fake news has become an epidemic, the responsibility of refuting the rumors lies on technological companies and other agencies involved in the pervasiveness of fake news. But this doesn't mean that we don't have to play any role in this regard. Instead this problem should be handled with a great concern as its spread is really devastating for world peace and the economy. Above all, it's our own responsibility to assure the credibility of any news before perpetuating it further as this is the only way we can tackle this ever-growing dilemma. ■

Mobile World Congress

Thousands of mobile industry leaders and consumers from all around the world gather once a year in the world's largest phone show, Mobile World Congress (MWC), to share their visions, innovations, and insights of the mobile industry on current and future trends. From February 27th to March 2nd, the event was held in Barcelona wherein millions of gadgets and devices from phones to tablets to smartwatches were showcased.

Phones

Besides all the big names that were in attendance, Nokia's old school handset 3310 was revived at this year's show that made the biggest splash. There were other companies too who impressed consumers with their latest technology launches, especially LG's G6 smartphone that was the best phone at the show, according to Tech Radar.

Tablets

Samsung took the lead in tablets at MWC 2017 with the release of their new tablets, the Galaxy Tab S3 and the Galaxy Book.

Wearables & Headsets

Reliability and features are two important aspects in wearables that attracts consumers. Huawei hit the show with its two new smartwatches, Watch 2 and Watch 2 Classic version with a special focus on fitness. Waverly Labs previewed a prototype in-ear wearable in MWC that translates conversations almost instantly. Samsung finally revealed Gear VR headset in addition to a touchpad controller that supports users to interact and navigate the virtual environment.

5G Network

The only invisible standard being showcased in MWC was the 5G network that's going to be the next phase of development in mobile technology. Although fifth-generation network standard services won't be available before 2020, ZTE, a top smartphone company in China, launched the world's first 5G phone at MWC. Samsung showcased its 5G Product Portfolio in its trade show along with a 5G router and a compact radio station.

Internet of Things

Intel revealed its project on a smart city, Citybeacon, to help follow traffic flow for different purposes. With cameras implemented into roadside structures, authorities will be able to access the data through the citywide WiFi controlled cameras and sensors. Drones will also be used for emergency situations. ■

What To Do
In Case of a Server Breakdown

With globalization, the use of internet has increased so much that heavy data traffic downtimes occur way too often. Many well reputed apps and sites have recently faced site break down, which affects revenue, customer satisfaction, time, and employee performance. The greater the network or database is, the larger the risk is to manage networks. Major companies, like Amazon, have recently dealt with instances of major websites and services falling offline, losing images, or left running like treacle. In the past few years, Microsoft, Google, and Twitter have all been in similar situations where their external networks failed and services were down for several hours. Some causes were due to server overloading while other companies haven't released formal statements. Companies use various methods for websites to prevent downtime by using a combination of a CDN service and a backup host to protect their site from both short-term downtime and major outages. **CDN Services** (Content Distribution Network) store and deliver cached content from your website to protect against short periods of downtime. Since April 2010, Google started to take load time in ranking sites, as Google's algorithm uses much more factors that determine how to rank search engine results. Improving load time is an effective way to help staying on top of search results. CDN also helps speed up load time, which is crucial in these days now. **Backup Hosting** enables users to confidently save data to a secondary hosting account. It's preferable to have a backup on a server in a completely different geographic location so as to have 2 different copies of the same data. Regularly backing up your data ensures the most efficient use of time and digital space, so it's convenient to back up your accounts on a daily basis. The cycle does not end here since it's an ongoing process to keep up efficient and quality changes in the frameworks of major websites. With the high demand on websites to maintain fast speeds and to avoid crashes, there needs to be a revolution to increase productivity continuously, and with frequent update patches, we will make it there in no time. ■

Skylite NETWORKS