



# The people Editors and Designers

# From the HoD's desk

## Prof. Dilip K Sen

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THE CAR IS ALL

KICK OUT LIMBO

E-SPORTS

THE FALL OF YAHOO!

TORRENTS

QUANTUM COMPUTING

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THE DAY THE  
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STRANGERS  
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WHO IS MR PRATAP?

THE MAN WHO RAISED  
HIS DAUGHTERS RIGHT

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# The Car is Alive

Shreyas N

## THEN

It's already been over 3 years since people started hearing about self-driving cars. The concept of cars driving themselves seemed like something right out of a sci-fi movie. Then, people started thinking about how safe these cars would be. Think about it, would you trust a computer enough to drive you to places? This was a serious issue to be addressed by the manufacturer of the cars as well as legal authorities. Thus began the journey of rigorous testing and development of this technology. The first year of research that is, by 2015 we had cars which needed tech support within about 15 miles. Needless to say this wasn't very satisfactory.

## NOW

Two years later the leaders in self driving cars are Google and General Motors. They have shown tremendous improvements since their first prototype with cars being able to drive themselves over 500 miles before needing tech support. Automotive Companies like Tesla, Nissan and Delphi are not far behind. Of course, all this is the testing phase; you don't need to worry about crashing into a car and having no one to shout at unless of course you're a regular visitor at Mountain View! These cars have the option of disengagements as well, which is a Manual mode of sorts which allows the car to be

controlled remotely or from inside. These are needed in case of any software or hardware failures or maybe just because feel like driving. Also, control with a joystick isn't completely implausible. You might need to brush up on your NFS skills a little! Google's fleet of these 'Self-Driving Smart Cars' drove over 630,000 miles with just 124 disengagements. Disengagements need not mean there was a failure; it just means that the company is trying out new tests. Tesla is already well established in making electric cars with complex AI's and is now using the real world information collected from their customers to improve their 'Autopilot' systems.

## ARE WE THERE YET?

unfortunately, the answer is no. We are still nowhere close to allowing these cars into crowded roads. But, looking at the pace with which this technology is improving, a vision of streets filled with driver-less cars is definitely a plausible future. Coming closer to home, these cars might be late to arrive in India for obvious reasons, but technology is surpassing all conventional barriers and it is an interesting idea that we may someday have driver-less Uber's and Ola's. The testing is only producing better results day by day and with the current brilliant minds that the world has, all that

# *Kick yourself out of the Limbo*

*Sahana B S*

**G**oogle, Linux, Facebook, Yahoo, Reddit, Dell... or the ingenious Snapdeal, Zomato, Ola.....see something common in these multi-million, billion dollar companies? Well, they were all founded by college students . when the founders were college students. The potential possessed by a student is unbeatable and the problems faced are incalculable. Solving these Gordian knots could lead to something big. Probably if Larry page wasn't worried about the World Wide Web being slow, Google wouldn't be born.

The other day when I was scrolling through the pages of Quora, there was a question, "What are some good software engineering projects?" I was startled to see plenty of ideas. Some were due to dire needs for oneself, some for the society and some for all. But trust me there are so many. Try to build an app, software or even a new language (there may be nerds out there, who knows!!). The worst is copying from seniors (or slight modification, whatever) or plying behind an Institute. Sometimes we have ideas but just feel too inferior to share it with friends or become too futuristic in thoughts and reckon that it's not good enough. There's just one well known mantra for this; don't tell.

Our efficiency will be better if we keep it to ourselves and go for it. Seek for help if necessary, never hesitate. Ideas conceived in the brain have to be fed with hard work and nurtured with patience. "Limbo" refers to the small world we have created for ourselves or rather what an erudite would call, "comfort zone". But living in this cocoon can never take us far. Just kick yourself out of it before it's too late and the burden of regret starts to dawn upon you. Spare some time for yourself, sit in solitude and solemn silence and talk to yourself. Be the interviewer and the celebrity, answer to yourself. Let's make the best out of our minuscule college life and achieve much more than just grades. After all even a little extra makes us extraordinary. There is a striking quotable quote, "Motivation can be provided but determination is solely one's responsibility". This article is just a small way to engender "motivation" to do something different, something big.

PS: The title is just a poor adaptation of the movie I personally admire, "Inception".



# The rise of ESPORT competitive video gaming

*Steve Jerold*

This might seem like a ridiculous topic but wait till you see what the “Virtual athletes” make later through the read. eSports might look like wasted effort to the ordinary person but on the contrary it is a very rewarding and captivating experience at the same time.

Well how did it come up and who plays It? To answer these questions I say eSports is the the byproduct of competitiveness in humans and the rise of technology around us. Even in the early days where we used to play on arcade machines we would challenge our friends to beat the high scores. This snowballed into larger well organized events like tournaments. By the time the 1990s came around, tournaments for arcade and console games had become increasingly common, with companies like Nintendo and Blockbuster sponsoring worldwide championships. Now who participates in these championships? There is a large population of people who assume that the players here are just the average

geek or nerd who detest physical strain and would rather play from their parents’ basement. Which was true for the early days but seems to be taking a shift in course in the early 2000’s. Studies have found that gamers are more social than non-gamers and are also more adept at multi-tasking.

The players are called competitive Esport athletes. Athletes?! Really? This thought might have crossed your mind I am sure, it has also sparked a large amount of controversy. Some of you might consider this to be a stretch of the term but take these points to mind, the players here go through rigorous mental and physical training to be at the top of their game over hundreds of other players who most likely are going through the same training as well. We see new medication in the market which is currently a booming industry purely for gamers, known as nootropics which is essentially a biohack for the brain which makes it function better and faster just to

increase the response time of a gamer by a few milliseconds. Yes milliseconds matter in video games. Before you jump up and say no drugs are bad we can reference this to how gatorade and protein drinks are used by athletes is similar to this. Providing this cognitive edge is taken advantage by many companies like nootrobox which have even started to sponsor eSports teams. There were also studies by scientists at the German Sports University that showed that esport professionals go through the same physical strains that of a normal athlete.

Now we dive into the numbers. No not the boring kind. It's all about the money here. eSports is a global industry as of now with a predicted revenue of 1.1 billion us dollars in 2019. That's 2 years away. eSports is a compilation of many games such as Dota2, League Of Legends, Counter Strike, Call Of Duty, World Of Warcraft (yeah the one from big bang theory ) and due to the boom of the smart phone industry there are games designed for them as well. Vainglory which very recently held its 2016 world championships had a total prize pool of \$120,000. As we can see this market is large and growing at a fast rate and player here have the opportunity to make it big. Take for example "The International" which is a five day Defense of the Ancients 2 (Dota 2) championship tournament. With up to 90 players from 22 countries, it's dwarfed by the Olympics in every respect save one: the prize money. The 16 teams competing will share in a prize pool of over \$20 million. The eventual champions will pocket almost \$9 million split between the team of five players, and even the lowest-

placing teams will still take home \$101,400 in consolation prize money. \$100,000 is roughly 68 Lakh Indian rupees, yeah that just happened. This is with an average of 35 to 45 minutes per game. There are also instances where players make way more money than the average Olympian. You might be thinking where do I sign up? Easy money right? Think again.

To get a basic sponsorship you'd need to be the best over 1000's of players and this is only achieved through years of playing the games and dissecting the game mechanics. We ourselves have gamers in our college with 4000 hours in game play which is equivalent to 170 days in game!. It might look simple at first but the amount of time and effort taken in is enormous.

We all have heard the saying "Choose a job you love and you will never have to work a day in your life." This statement is never truer than in this situation. We can see that the world is moving away from the regular repeated course it used to follow. Doing what you love and getting paid for it is true capitalism is what I say. The market does have its pros and cons. eSports is not mainstream yet. It will when your (a) 70 years old neighbor will know about it or (b) when eSports games will be broadcasted on main TV properties (which may happen faster than you think). There is also the concern of certain health issues but on the other hand it is growing at a rapid pace and winning the prize money will get you going places. We still may debate on whether eSports is a legitimate sport or not but that is for a later time. Games are all around us now a days, young or old everyone plays it at some point in their lives. It is you who decides how it effects your life.

# *The Rise*

# **Yahoo!**

*Alphy Elizabeth Joseph*

# *The fall*

What does it take for one of the most popular search engines of all time, a multi billion dollar company to sink to a point of such sheer desperation that it had to be sold at a value far lesser than what it was once worth? Well, let's delve into that shall we? Yahoo! might not have earned the cult status that Google did, I mean, you'd never hear anyone say "Just Yahoo! it", nonetheless, it was one of the biggest Internet companies in the world with nearly 650 million unique users visiting their website every month. Not too long ago, it overtook Google with a 79% profit on the revenue earned making it the highest among all Fortune 500 companies. Like all the game changing companies out there Yahoo also started as a time pass experiment for two Standford University students, (It's always one of them isn't it?) Jerry Yang and David Filo. In 1994 they created a website called "Jerry and David's guide to the world wide web" which was basically a directory that listed most of the websites on the Internet. After receiving a million hits they renamed the website to "Yahoo!" just because they liked the word and later decided it stood for "Yet Another Hierarchical Officious Oracle", you know, just so they could make sense of it. A few high profile acquisitions and skyrocketing of stocks later they realized they had struck gold. And so the glory days began.

Then what went so horribly wrong? The epilogue for the long sad story of Yahoo! is finally being written. Most people blame its "nice guy" founders. And that doesn't sell in our cut throat world. Unlike their competitors the duo took fewer risks. They passed up the offer to buy Google in 2002 (that's right!) and again Facebook in 2006. At the time these acquisitions looked like risky uneconomical moves. That's the whole point. Web companies need the unique power of founders to do unpopular things. Larry Page advocated for Google to buy the

money-losing video sharing site YouTube in 2006; Zuckerberg made what seemed like an outrageously overpriced bet on the photo sharing application Instagram in 2012. Well, we all know how they turned out! This is how tech companies survive—the ability to take risks. After Jerry Yang took over as CEO in 2007 he was either too nice or too unwilling to take risks. He could have let go of a great deal of employees and invested that money in technology and the smart phone revolution raging at the time.

Although his biggest slip in decisions was probably when he declined a major lifeline; Microsoft made a bid to purchase Yahoo! for \$45 billion in 2008 in an attempt to compete with Google. The founders believed that it was worth far more than what Microsoft was offering. Considering that they eventually sold to American telecommunications company Verizon for a mere \$4.8 billion(Life, huh?), it's safe to say that, that was a pretty boneheaded move. But you can't really blame them either for having faith in the company they toiled so hard to build. So the inevitable happened and Yahoo!'s financial and stock values began to decline.

In a final attempt to stop their plummet to rock bottom Yahoo! Hired Google executive Marissa Mayer as CEO in 2012 to turn things around. After a 4 year reign she failed to do so. Experts say she could have made Yahoo! a real player in social media but decided to invest in sites like Tumblr and Flickr instead which produced no revenue, mostly because Yahoo! at this point couldn't produce an environment for startups to thrive. Many such unsuccessful moves later, everyone gave up on Mayer as well. And that's how it all ended the way it has and all we can do is mourn the loss and hope that Verizon is not too cruel. Fingers Crossed!



# Pirate or Partake?

**Shreyas N**

The oncoming of the internet made the connectivity between different parts of the world, it also brought about the idea of sharing data. The 70's to 90's saw the rise of decentralization in filesharing. It started with the Bulletin Board System and saw the increased use of the term Shareware, then came Usenet or Newsgroups all of which made filesharing a much easier and a decentralized task.

The music was not left behind. We all have heard of Napster which made people go crazy in the 90's. It allowed songs to be shared among scores of people at the click of a button. It also caused artists to lose business since people were getting songs for free on the internet. It used peer to peer system strictly for sharing mp3 files. But Napsters' database was centrally located which eventually led to its demise, but Napster had already spread the idea of peer to peer sharing among the masses.

Thus, peer to peer sharing became a new fad and many new softwares came up with new uses with this technology including BitTorrent which was created by Bram Cohen in 2001.

What made BitTorrent great was that it put all the greatest properties of its predecessors and put it onto one easy to use platform. It used the concept of breaking files into smaller pieces and decentralized peer to peer distribution. After a few more years, several more advancements made it a mainstream technology and led to the

creation of trackerless "Torrents". A new much smaller platform called utorrent was introduced which gained immense popularity and is used by millions across the world today.

Kickass Torrents, The Pirate Bay, RARBG, EZTV, Torrentz are some of the websites and many of you readers might have grown up using. Basically, torrents are powered by the number of people downloading and uploading a file. Seeders are stations which have completed the download and are powering your download. And leechers are the number of people still downloading the file. This mechanism was abstract to a non tech savvy user and made downloading at the click of a button as easy as searching for something on Google. Torrents saw their highest use in the years of 2013-2015 as their popularity only increased over the already existing millions.

Torrents by their nature are just sharing the files on someone else's PC, but this loophole allowed people to pirate premium content of many business'. The Music/TV Show/Movie you downloaded yesterday was downloaded by millions of others which meant that the people who were making these TV Shows/Movies etc were potentially losing millions of customers. The legality of sharing Copyrighted Content and Products using torrents has been a hot topic for debate in the past few years with many celebrities going as far as calling torrent users "thieves". Over the past 10 years several people belonging to BitTorrent and its subsidiaries have been arrested for Copyright Infringement and it was for this reason that 2016 saw a hunt for torrent sites by legal authorities. Many big names in the business like KickAss Torrents, Torrentz etc were shut down with the charge of Copyright Infringement and in India's Copyright Act was also implemented aimed at the users who would download illegal content with a warning of upto 3 years in Jail.

Well Torrents have seen their ups

and downs. The word torrent has become a very common term in the world which is a proof of its immense popularity. But is it dead? The answer is a resounding NO. Though many torrenting websites were shut down , many more are resurfacing in their place. Torrent downloads are still flourishing and it doesn't look like it will reduce anytime soon. The laws on downloading Copyrighted content however have become very strict, so as a peer I am obligated to ask you not to download such content. I'd like to end this article by asking you to go ahead and download using torrents , but also to do so responsibly.



# A Sneak Quantum Computing Peek

*Shreyas Y L*

**T**here is always a shortage of space when it comes to storage of data in the field of Computer Science. Code Optimisation, after a certain extent, doesn't help you much in improving the efficiency of storing large amounts of data. What we need is a computing system that can store more information using minimum amount of space. In other words, we require a system that stores more information in one bit, rather than just 0 or 1.

Welcome to the realm of Quantum Computing.

Let us have a brief look at some of the basic concepts that have changed the field of Quantum Computing from a hypothesis to a reality. In May 1981, renowned scientist Richard Feynman's lecture on how a Quantum System can not simulate a classic system efficiently and his idea of the basic model of a Quantum Computer that could possibly do the same, revolutionised the idea of Quantum Computing. Later in 1985, David Deutsch, at the University of Oxford, described a Quantum Computer by extending the definition of a Universal Turing Machine. Just like how a Universal Turing Machine can simulate any other Turing Machine, a Universal Quantum Computer can simulate any other set of Quantum Computers. This provided an insight towards how Quantum Computers are supposed to work and the efficiency of their operation. An important contribution was made by Tommaso Toffoli in 1981 when he first introduced the reversible Toffoli gate. The Toffoli gate is a device used for computation, having 3 bit input and output. If the first two bits are set, then the third bit is inverted. Else, all the bits stay the same way. In the year 1998, the first working 3 qubit(quantum bit) NMR(Nuclear Magnetic Resonance) computer was demonstrated. Recently, on January 24th 2017, D-Wave Systems Inc. has announced the commercial availability of their D-Wave 2000Q, a 2000 qubit Quantum Computer.

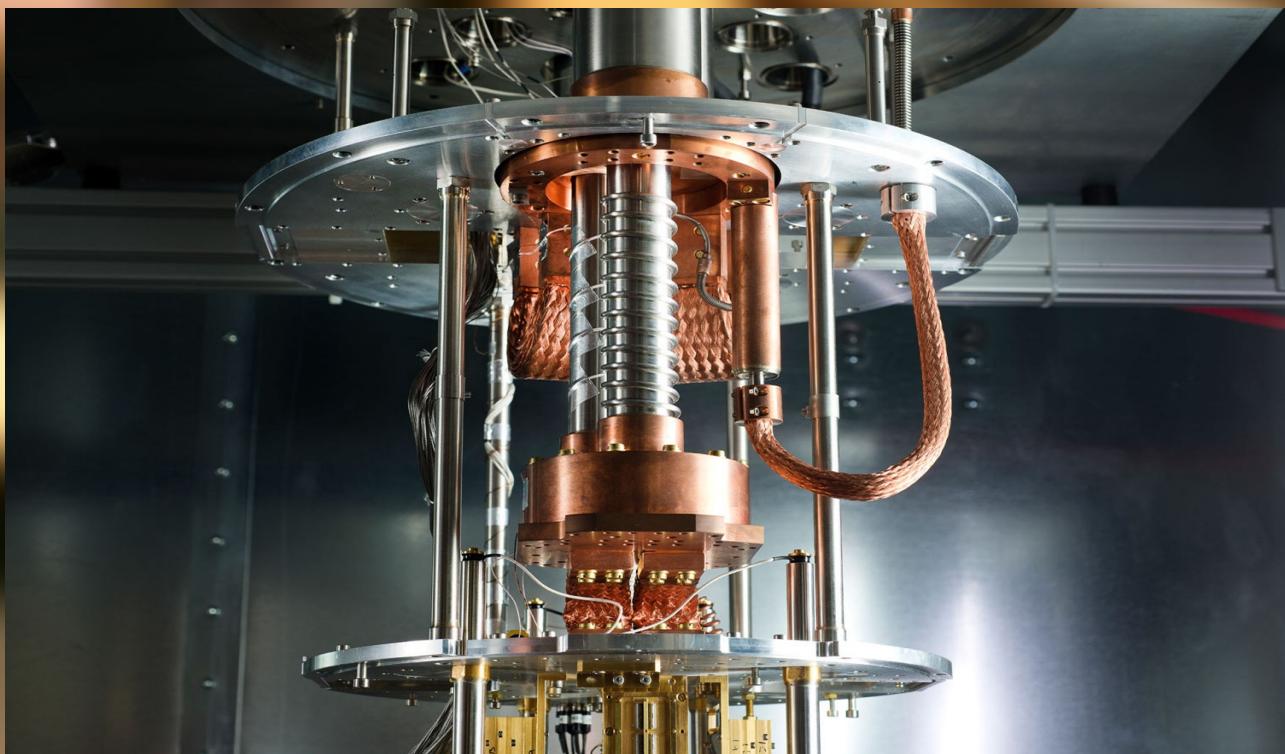
**Concept and Working of a Quantum Computer:**

Discussing the topic on a quantum level, it uses the superposition principle to compute the state of its qubits. Therefore at any given time, a qubit can have a value of either 0 or 1 or both 0 and 1 simultaneously. This considerably reduces the look up overhead during the event of solving iterative problems and frees the user from binary constraints. Since a quantum system is also different from a classical system, the constituent qubits may not be independent of each other. This

phenomenon is called quantum bit entanglement which is a direct result of the quantum entanglement. And all the qubits have a correlation with other qubits because of the entanglement phenomenon. This means that , if there are  $n$  qubits there are  $2^n$  possible correlations between the qubits. Now since it is not possible to just write down all these  $2^n$  possible combinations, a Quantum Computer is used to record all these correlations in such a way that they make sense.

Therefore, the basic idea is to increase the amount of information stored in one bit, since each bit is correlated to some other bit holding additional information by courtesy of the entanglement phenomenon. However, there is just one problem. The input given to a quantum computer can be entangled qubits in the state of superposition, the output produced by the Quantum Computing System is also of the same nature. Entangled qubits in the state of superposition. Which means that the output will change even before one can observe the same. Even though the output produced will never be able to describe the state of the qubits accurately, it is able to describe the manner in which the qubits behave as they are correlated to each other. This means more information in less number of units to store the information. This can be verified from various algorithms devised for Quantum Computing Systems like the Deutsch Josza algorithm. Since a Quantum Computing system has the capability to process large amounts of information faster than its classical counterpart, it can considerably reduce the storage space required for the same upto a significant level. There are talks of a powerful computing system such as this revolutionizing the Virtual Reality industry by 2050. It's ability can also be utilised in the field of gaming and it can deliver a tremendous transformation in the field of Artificial Intelligence(AI).

The dawn of a new era in Computer Science has begun.



# Let's talk Tax

*Chandrajith K S*

**G**oods and Services Tax, commonly referred to as GST is probably the most discussed financial reform until the recent demonetisation act because it is bound to have an indelible impact on the common man. Touted as India's biggest taxation reform yet, its benefits are aplenty. Before we understand GST we need to understand the current taxation regime of our country.

Currently taxes are divided into two sections: Direct and Indirect. GST will impact only the Indirect taxes. Direct taxes are taxes which cannot be shifted and it is paid directly to the government by some individual or company; income tax for example. Indirect taxes on the other hand can be shifted, before we see what this means we will look at the different types of indirect taxes.

**Indirect taxes:**

- a) Central Excise: Tax levied by the central government on the manufacture of goods.
- b) Sales tax:
  - i) Local Sales Tax: If a good is manufactured and sold in the same state then the tax levied on this good is known as Local sales tax or VAT(Value added tax).
  - ii) Central Sales Tax: If a good is manufactured in State A and sold in State B the tax levied on this good is the Central Sales Tax and it is paid to the Government of State A.
- c) Service Tax: Tax levied on services provided by some individual, company or Organization. Example: We all pay service tax when we dine at a restaurant. Now let us try to understand shifting of tax using the following scenario: Let us consider that a manufacturer manufactures a commodity for Rs. 100 at a tax rate of 10%. The Wholesaler pays Rs. 110 for this commodity out of which Rs. 10 is paid to the Government. The Wholesaler now sells this commodity to a Retailer for Rs. 150 at 10% tax. He receives Rs. 165 out of which Rs. 15 is the tax, but the Wholesaler has already paid Rs. 10 as tax so he will now pay Rs. 15 - Rs. 10 = Rs. 5 to the government. The Retailer now sells the commodity to the customer for Rs. 200 at 10% tax. He receives Rs. 220 out of which Rs. 20 is tax but since he has already paid Rs. 15 as tax to the wholesaler he now pays just Rs. 5 to the government. The total tax collected by the government over this commodity is Rs. 20 but this has not been paid by one person, the tax was shifted.

The above scenario was just an example to understand tax shifting. It is quite evident that the current taxation regime is highly convoluted. With the GST reform, all the indirect taxes will be subsumed under one tax: The Goods

and Services Tax. GST has been introduced to ensure transparency and tackle the fiscal (government revenue) deficit. We will now see its implications.

GST will be levied on two levels simultaneously, State GST and Central GST. Under the current taxation regime, tax is levied on the final output. Bloating of prices is observed because cascading of taxes takes place (tax on tax). If the manufacturer pays 10% tax on a commodity priced at Rs. 100, the wholesaler will now pay tax on the new amount i.e Rs. 110 and so on. Consequently the Consumer will have to pay tax on the cumulative price of the commodity hence explaining the bloating of prices of goods. In theory an exorbitant amount of revenue seems to be collected but this is not true because most of the tax is evaded.

Under the new regime, tax will be levied only on value addition rather than the final output. Tax will be levied only the activities performed in that stage that leads to increase in the value of the good. For example, Raw Cotton--> Cotton--> Yarn-->Cloth--> Trousers. The manufacturer will now pay tax on the cotton yarn. The wholesaler will pay tax on cost of cloth-cost of cotton yarn and so on. Therefore if the price of trousers were Rs. 200 and Cloth say Rs. 100 the consumer would have to pay a tax of Rs. 10 if the rate was 10% under the GST regime. In the current regime the consumer would have to pay tax on the final output so the tax levied would be Rs. 20 at the same rate. GST is therefore also called multi staged tax. Since the tax is monitored at every stage, tax evasion is also difficult.

We will now look at IGST(Integrated Goods and Services Tax). With the abolition of Central Sales Tax it would now be discouraging for a manufacturer to sell his goods in another state but that is not the reality. For example, a manufacturer in Delhi will now receive the SGST( State GST) if he sells his commodity in say, Karnataka (He/She would earlier receive the Central Sales Tax) . Hence GST is a destination based tax. IGST also serves the purpose of monitoring interstate trade. The introduction of GST will hence make the entire country a level playing field even for business as the tax is uniform ( both CGST and SGST are levied simultaneously).

All GST pertinent decisions including the rate of GST will be taken by the GST council which consists of the following members:

- a) Finance Minister of the Union who will also serve as the chairman of the council.
- b) Minister of State for Revenue. c) Finance Minister of the States. We will finally look at the GST rate structure:
  - 1) Standard rate of GST will be 18%.
  - 2) The GST rate on Ultra luxuries and Sinned goods (Tobacco and alcohol) will be 28%.
  - 3) The GST rate on food grains (Essential commodities) will be 0%.
  - 4) Items of common consumption: 5%.
  - 5) Heavy consumer goods such as washing machines and refrigerators at 28% with rider(i.e transportation charges included,a seperate 28% will not be levied on transportation charges).

# The Day the Internet stood still

*Mayank Metha D*

Buckminster Fuller had once quoted “Humanity is acquiring all the right technology for all the wrong reasons.” With advance in computer technology, the evil in the field has also advanced. Internet was developed for the people to learn and communicate. Ever wondered what will happen if there was an Internet blackout? Sounds like a scene from Mr.Robot or The Die Hard Series or like a task in Watchdogs. Well, partial Internet blackout did happen. 2016 witnessed a large amount of record breaking cyber attacks which were fictions a few years back.

## *So, what exactly happened?*

On October 21st 2016, a quarter of the Internet was taken down. This was an action of cyber attack on DNS provider named Dyn. This was no ordinary cyber attack as the biggest online services like Amazon.com, BBC, Electronic Arts, GitHub, Netflix, PlayStation Network, PayPal, Spotify, Starbucks, Twitter, Visa, Xbox Live and many others were the victims of this attack. This cyber attack has a generic name called Distributed Denial of Service (DDoS). In simple nontechnical terms assume an intersection of some roads where one road takes the traffic away from the intersection while other gets traffic towards this intersection. Computer Networks have a similar issue. When multiple devices or network send message to a single device, the receiving device is unable to process all the messages at the same time. This leads to jamming of

the network. Such a network jam makes the specific service unavailable. This is DDoS. The DDoS that took place on Dyn was caused by a Trojan called Mirai.

## *Mirai*

Mirai (Japanese meaning future) is a simple Trojan. The reason for specifying this Trojan is because of the record it created. 1 Tbps of traffic on the network of the victim was a world record traffic generated by Mirai. It exploits the basic ideas to generate an attack. Let's not get into more technical details of Mirai. The simplicity and power of Mirai was what interested me.

After reading about it on Kaspersky, Checkpoint and other tech related blogs, I was able to get hold of 6 strains of this Trojan. Going through the code, I did try to learn the working of the Trojan and analyse it. It targeted the Linux OS and IoT devices. Linux OS was converted to servers and IoT devices like webcams, CCTV, routers were made to report to the servers. Effected IoT devices also send messages to victims at same time. I too did try to use the server attack part of the code on my own system and try to find the other devices that were attack. This Trojan also showed me that however secure we think the computer is, there is still a drawback that can be exploited to create havoc.

A famous dialog from Spiderman goes, “With great power comes great responsibility”, technology is powerful but use it responsibly. Don't use technology to disrupt others' work or other criminal ways.

The Internet is flooded with data of various kinds. The one most important one being personal data which attracts the likes of hackers. Users of the Internet are fully confident about their privacy being secured. But considering that no system can achieve ideality in all respects, we have to accept the fact that a back door is possible to encroach the privacy even in the most secured environments. Lets analyse this deeply.

A famous controversy broke out between Apple and the US Federal Bureau of Investigation(FBI) after the infamous San Bernardino attacks on December 2,2015. The iPhone used by one of the shooter was recovered. This was a huge breakthrough for the case considering the amount of information that can be retrieved from a terrorist. A severe problem arose as it was naturally password protected. The FBI reached out Apple for assistance, but they had a different story to tell.

Apple, like any other company have policies that gave the highest priority to the user's personal information. Unlocking a phone tells a huge flaw in the trust gained by its customers as if there was a possibility of at least one of them being unlocked, privacy and security of user information will become baseless. Lets remember that the phone under consideration was not just anyone's phone, but a terrorist's. Imagine the threats that can be removed with the information gathered from it.

As usual, when there is a controversy

# Government and Data Privacy

*Pradeep J S*

to resolve, the court interferes. Both sides debated heavily, with Law enforcement authorities (FBI) say that encryption used by the likes of Apple makes it harder for them to solve cases. Technology firms have kicked back, saying that encryption is key to protecting user data from hackers.

The case went on and ultimately the FBI won convincing everyone that it appeared to be the best of a bad situation. Reports suggested that a third party outside Apple did the job well, but as expected, Apple never confirmed it. Since then, there have been many requests from law enforcement agencies across the country for Apple to help unlock other iPhones.

So the we question we started with still stays. Governments appear to be above privacy, which goes without saying that its by far, the best for its people.

# P o e m s

## MERI ZAMEEN, MERA DESH

Garv ho mujhe jab zubaan pe tera naam aaye..  
beintehaa khushi ho jab koi kahe ki main tera hissa hun..  
Teri zameen kisi jannat se kam nahi..  
nachu mai teri baarish main..  
Khoon bahe toh teri mitti main mile..  
dum toote toh teri hi zameen pe dum toote..  
Agar milna ho mitti main mujhe, toh tera naam leke tere hi mitti main milu..  
Holi ke rangon se sajau tumhein..  
raavan ke jalne ke aag se roshini laun tere aangan main..  
Inquilab ho jau tere ishq main..  
maru main aur amar tu ho jaye...



*Kiran M. Savalgi*

## SPARKS

Some people have a spark at first shot.  
What's a spark you wonder?  
Ask me and I shall tell you.  
It's when she knows exactly which song you are trying to remember.  
It's when she knows which meme you are referring to even when you aren't sure.  
It's when she cracks a better joke when yours fails, just so that you both can continue laughing together.  
It's when she knows your emotions even when you wanna hide them.  
It's when she improves your comebacks just so that you can be smoother the next time.  
It's when she knows exactly which "the one with the" whenever you mention a scene.  
And that's when you know she is your firework.

*Subrajyothi Sen*

## STRANGERS

A stranger needn't be someone you've never met.  
It can be someone you used to know really well.  
It can be someone who didn't mind being in their pjs in front of you.  
It can be someone who had planned a trip to Spain with you.  
It can be someone who wanted to explore all the food streets with you.  
Mom was right. Sometimes.  
We should be careful of strangers.  
Coz some promises are never kept.  
Some trips are never taken.  
And unfortunately some things are never forgotten.

*Subrajyothi Sen*



# Who is Mr. Pratap?

*Shashank S*

Mr Pratap is a quiet man.

Or so I assumed because he never talked to anyone. This in itself wasn't that surprising, nobody really talks to each other on a bus ride. When everybody on the bus was busy Mr Pratap always seemed peaceful in his own little space. Mr Pratap didn't carry a newspaper like the gentleman beside him, he didn't have earphones plugged in like the girl two seats ahead. He didn't even nap, like the guy three seats back. There's a hint of a smile on his face as he looks out the window. Everyday is a different view. Mr Pratap enjoys the view, everyday.

Mr Pratap always gets on one stop after me. The bus is relatively empty so he gets to pick his place. He always picks the same place, right in front of the door, window side. He has a traveller's pass, which he promptly shows to the conductor. The conductor recognizes Mr Pratap, greets him. He doesn't have to show the pass but Mr Pratap does it anyway.

Mr Pratap always carries an attache. A small one. He keeps it on his lap, his arms neatly folded over them. He wears spectacles, two pieces of glass suspended over his nose. He always dresses smartly. Pressed black trousers, a bluish grey shirt, dark chocolate waistcoat. He always dresses the same. Hair neatly combed and remarkably still even with the wind from the window. Mr Pratap, it would seem, uses hair gel.

I know Mr Pratap. I sit in the seat behind him. I once peeked at his attache. It was an old fashioned leather attache, with a name tag. Mr Pratap. I found it weird because it said "Mr Pratap". He turned a bit, smiled at me. I smile back. Mr Pratap liked me, he is my friend now.

Mr Pratap travels everyday, Monday to Friday. I don't know about the weekends because I don't commute on weekends. He never misses the bus, never takes a day off. Every morning he takes the seat in front of me, but before he does that he always smiles at me. We don't talk, Mr Pratap and I. Our conversations begin, is comprised of and end at that particular moment. The smile.

Today is Monday. Mr Pratap didn't get on the bus.



# The man who raised his daughters right

*Alphy Elizabeth Joseph*

Dangal : we've all watched the movie, been in awe of Khan's acting prowess and were inflated with patriotism a week after, but this isn't meant to be a movie review; I just thought the man who inspired it ought to be talked about.

Mahavir Singh Phogat was in the perfect setting to be a domineering patriarch. He hailed from a small town in Haryana and amidst its festering tradition of female infanticide became the father of four girls. Any other man would be worried about making the money to marry them off. He probably was too, but had better plans for them before that. What made this man think so differently from those around him? While most men sneer at their daughters for not making the roti round enough, Phogat used his position as their father to push them into doing strenuous exercise. He was just as bit as strict and dominating as the next person but he used it to help his daughters make a name for themselves in wrestling, a sport considered inappropriate for women.

He fought all odds and faced all the ridicule; he didn't care what other people thought. We see the injustice women face every day and brush it off saying these things happen in "small towns". But we should probably remember that there are also people like him in these towns and many others who consider their girls as important as boys and believe that treating them as equals is how you raise them "right".





