



K.L.N. College of Engineering

Department of Information Technology



## PRINCIPAL MESSAGE



## THE EDITOR'S DESK



It is a matter of great pride and satisfaction for K.L.N. COLLEGE OF ENGINEERING to bring out the News Letter 'I'STORM' Released from the Department of Information Technology. The College has made tremendous progress in all areas- academic, non-academics, capacity building relevant to staff and students. The College has achieved another milestone in getting NBA (National Board of Accreditation). I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to Dr. R. Alageswaran, HOD/IT under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.

**PRINCIPAL**  
**Dr.A.V. RAMPRASAD**

It gives me immense pleasure to note that response to this newsletter of our department i'STORM has been overwhelming. The wide-spectrum of articles in different sections gives me a sense of pride that our students and professors possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. Commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

**H.O.D (I.T)**

**DR.R. ALAGESWARAN**

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## OUR COLLEGE :

### Vision

To become a Premier Institute of National Repute by Providing Quality Education, Successful Graduation, Potential Employability and Advanced Research & Development through Academic Excellence.

### Mission

To Develop and Make Students Competent Professional in the Dynamic Environment in the field of Engineering, Technology and Management by emphasizing Research, Social Concern and Ethical Values through Quality Education System.

## OUR DEPARTMENT:

### Vision

To emerge as a centre of excellence through innovative technical education and research in Information Technology.

### Mission

To produce competent information technology professionals to face the industrial and societal challenges by imparting quality education with ethical values.

## Program Outcome

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## Program Educational Objectives

*The Educational Objectives of Information Technology Program represents major accomplishments that we expect from our graduates to have achieved three to five years after graduation. More specifically our graduates are expected.*

- 1. To excel in industrial or graduate work in information technology and allied fields.*
- 2. To practice their professions conforming to ethical values and environmental friendly policies.*
- 3. To be able to have an exposure in emerging cutting edge technologies and adapt to ever changing technologies.*
- 4. To work in international and multi - disciplinary environments.*

## Program Specific Outcomes

- 1. To create better learning environment in line with technological updation and research progress.*
- 2. To give industry exposure through research and consultancy in Information and Communication Technologies.*

## ICON OF THE MONTH

### Timothy Donald Cook



**Timothy Donald Cook** (born November 1, 1960) is an American business executive and industrial engineer. Cook is the Chief Executive Officer of Apple Inc., who previously served as the company's Chief Operating Officer, under its founder Steve Jobs.

Cook joined Apple in March 1998 as a senior vice president for worldwide operations, and then served as the Executive Vice President for worldwide sales and operations. He was made the Chief Executive on August 24, 2011, prior to Jobs' death in October of that year. During his tenure as the Chief Executive, he has advocated for the political reformation of international and domestic surveillance, cybersecurity, corporate taxation, American manufacturing, and environmental preservation.

In 2014, Cook became the first Chief Executive of a Fortune 500 company to publicly identify as gay. Cook also serves on the boards of directors of Nike, Inc., the National Football Foundation, and is a trustee of Duke University. In March 2015, he said he planned to donate his entire stock fortune to charity. The research published at the University of Oxford characterized Cook's leadership style as paradigmatic of founder centrism: explained as a founder's mindset, an ethical disposition towards the shareholder collective, and an intense focus on exponential value creation.

#### Early life and education

Cook was born in Mobile, Alabama, United States. He was baptized in a Baptist church and grew up in nearby Robertsdale. His father,

Donald, was a shipyard worker, and his mother, Geraldine, worked at a pharmacy.

Cook graduated from Robertsdale High School. He earned a Bachelor of Science (B.S.) in industrial engineering from Auburn University in 1982, and his Master of Business Administration (MBA) from Duke University's Fuqua School of Business in 1988.

#### Pre-Apple era

After graduating from Auburn University in 1982, Cook spent 12 years in IBM's personal computer business, ultimately serving as the director of North American fulfillment. It was during this time that Cook also earned his MBA from Duke University, becoming a Fuqua Scholar in 1988. Later, he served as the Chief Operating Officer of the computer reseller division of Intelligent Electronics, and in 1997 became the Vice President for Corporate Materials at Compaq for six months.



After Jobs resigned as CEO and became chairman of the board, Cook was named the new Chief Executive Officer of Apple Inc. on August 24, 2011. Six weeks later, on October 5, 2011, Jobs died due to complications from pancreatic cancer. *Forbes* contributor Robin Ferracone wrote in September 2011: "Jobs and Cook proceeded to forge a strong partnership, and rescued the company from its death spiral, which took it from \$11 billion in revenue in 1995 down to less than \$6 billion in 1998 ... Under their leadership, the company went from its nadir to a remarkable \$100 billion today".

In April 2012, *Time* included Cook on its annual "100 Most Influential People in the World" list. On October 29, 2012, Cook made major changes to the company's executive team. Scott Forstall resigned as senior vice president of iOS and became an advisor to Cook until he eventually departed from the company in 2013. John Browett, who was Senior VP of retail, was dismissed six months after he commenced at Apple, when he received 100,000 shares worth US\$60 million. Forstall's duties were divided among four other Apple executives: design SVP Sir Jonathan Ive assumed leadership of Apple's human interface team; Craig Federighi became the new head of iOS software engineering; services chief Eddy Cue became responsible for Maps and Siri; and Bob Mansfield, previously SVP of hardware engineering, became the head of a new technology group.

Cook's executive changes occurred after the third quarter of the fiscal year, when revenues and profits grew less than predicted. One commentator said that Forstall was forced to step down, as Cook "decided to lance the boil as internal politics and dissent reached a key pitch". Since becoming CEO, Cook focused upon building a harmonious culture that meant "weeding out people with disagreeable personalities people Jobs tolerated and even held close, like Forstall" although, another journalist said that "Apple's ability to innovate came from tension and disagreement." On February 28, 2014, Cook made headlines when he challenged shareholders to "get out of the stock" if they didn't share the company's views on sustainability and climate change. In May 2016, Cook traveled to China to meet with government officials there after the closure of Apple's online iTunes Store and iBook store by the Chinese government.

In 2016, some analysts compared Cook to former Microsoft CEO Steve Ballmer, claiming that innovation had died down since he replaced Jobs, similar to when Ballmer became Microsoft CEO in 2000. In December 2017, Cook was a speaker at the World Internet Conference in China, where he stated that "the theme of this conference developing a digital economy for openness and shared benefits—is a vision we at Apple share. We are proud to have worked alongside many of our partners in China to help build a community that will join a common future in cyberspace."

Alongside Google vice-president Vint Cerf and AT&T CEO Randall Stephenson, Cook attended a closed-door summit held by President Barack Obama, on August 8, 2013, in regard to government surveillance and the Internet in the wake of the Edward Snowden NSA incident.

Following the December 2015 terrorist attack in San Bernardino, California, in which 14 people were killed by Rizwan Farook and Tashfeen Malik, the Federal Bureau of Investigation solicited Apple to assist in "unlock[ing]" an iPhone 5C used by Farook. On February 16, 2016, in response to a request by the Department of Justice, a federal magistrate judge ordered Apple to create a custom iOS firmware version that would allow investigators to circumvent the phone's security features. Cook responded in an open letter, wherein he denounced the government's demands as constituting a "breach of privacy" with "chilling" consequences.

### Awards and honors

- Financial Times Person of the Year (2014)
- Ripple of Change Award (2015)
- Fortune Magazine's: World's Greatest Leader. (2015)
- Alabama Academy of Honor: Inductee. (2015)
- Human Rights Campaign's Visibility Award (2015)

-S.Anusuya Devi(Third Year)

## CLOUD COMPUTING

Cloud technologies are gaining momentum every day in the largest data centers and the smallest businesses, offering services that encompass everything from the infrastructure down to the software level. There are many potential benefits as well as risks, but market leaders like Amazon, Rackspace, IBM, and Microsoft are bringing the cloud from the bleeding edge to the center of the IT landscape.

## Amazon offers developers too much choice in the cloud, and that's a good thing

As a developer's needs mature, along with those of their organization, AWS will be there with products to fill that void.

Most businesses struggle to provide enough value to their customers. Amazon Web Services (AWS) has a different problem: It offers too much. As analyst Sam Charrington once described the AWS investment philosophy: "We'll continue to invest in basically everything." So much of "everything", in fact, that even AWS employees struggle to make sense of the bewildering array of services the cloud giant offers.

And yet, as one AWS employee explained, "too much" choice is a good thing, not bad. In a helpful blog post, AWS strategist Joe Chung walked through how developers should view and make sense of the plethora of services at AWS.

### Is 'everything' a problem?

AWS CEO Andy Jassy trumpeted from the AWS reinvent stage in late 2017 that "Customers don't want to settle for less than half the functionality of the market leader." While digging at Google Cloud and Microsoft Azure, Jassy also laid bare the AWS mentality: Give the customer what she wants...or someday may want. Maybe.

Writing in the wake of Jassy's keynote, I noted, "While Google is deep in machine learning and artificial intelligence, and Microsoft is a strong choice for enterprises looking to maximize their existing investments in Windows, AWS offers everything from serverless database services to tooling that makes getting started with machine learning much more approachable. Amazon is building out AWS much the way it builds its retail operations: With almost too much choice."

What looks like "too much choice" at first glance, however, may end up being not nearly enough, as Chung wrote: Perhaps, like me, the first time you stepped into a big box home improvement store you found yourself overwhelmed by all the choices of materials available to fix a simple towel holder in your bathroom. Over time, after

visiting the store again and again, you began to know exactly what to buy and where in the store to find it. In fact, you even found that this store of choices didn't have the one variant or size that perfectly fit the needs of a recent project. Even with all this choice, there are still gaps. AWS cloud provides the new digital services and materials that help today's businesses keep pace with innovation. One could even say AWS is like an industrial supply store for the digital age, full of the variety of services you need now and may need in the future.

In other words, the fact that you don't know how to use a particular service today doesn't mean you won't need it tomorrow. As a developer, or her organization, matures, her need for different tooling will mature, as well.



### For the cloud that has everything...

Looking at this idea through the lens of databases, this philosophy has led AWS to offering multitudinous options so that a developer can select the best tool for the job, and often multiple tools to handle one job or application.

Indeed, in a series of industry conversations it has become clear to me that there's value in providing choice. A developer approaches a cloud, be it AWS or another, with a set of individual skills. For example, one might know JSON, making a document store like MongoDB a natural fit. Another developer comes with deep SQL expertise and thus Aurora or Redshift would be better. AWS' approach is to make it as simple as possible for developers to build apps quickly, whatever their backgrounds and whatever the future trajectories their careers will take. Other

cloud providers have sometimes tried a different approach, rolling a variety of database options into one. Microsoft's Cosmos DB is an example of this.

The risk, however, is that in trying to take too many database options and merge them into one data model or query technique, at some point you give up programmability, scale, and more. Giving developers more familiar, separate options turns out to be a better route to developer productivity, even if at first glance the complexity can be daunting.

-P.LakshmiPrabha(Third Year)

## BIG DATA

Big Data is happening now. Learn about the tips and technology you need to store, analyze, and apply the growing amount of your company's data.

### **Here's why Microsoft is 'all-in' on quantum computing**

Microsoft is reassuring users that they are making advancements in quantum computing, noting in a Friday blog post that it's working "everyday" to help reform the future of computing.

Julie Love, Microsoft's director of quantum computing, wrote in the post that her team has a "good understanding of what's needed" to build a quantum computer that could revolutionize the way we get work done and pursue academic research.

Love explained that certain problems impossible for humans can be solved in a mere 100 seconds by quantum computing. These problems are in material science, chemistry, genetics, medicine, and the environment and, according to the blog post, are made solvable based on the physics of qubits. According to Love, not all qubits are equal and some are unstable. What sets Microsoft apart are topological qubits that correct each other. Microsoft is working on a scalable solution that is set to run on Azure cloud and will be more immune to errors.



The blog post stated that Microsoft is the only major company building this kind of correcting qubits. Other companies, like Intel, have also been working on their own approaches to qubit-based quantum computing as well.

Last year, Microsoft released a Quantum Development Kit that included a programming language for people who want to start writing quantum computer applications. The post stated that this language, Q#, was designed for developers who are interesting in learning how to program for quantum computers regardless of whether or not they are experts in the quantum physics field.

Love emphasized that this development kit was released so developers could "join us on this journey" of quantum computing. Though quantum computing is making a significant impact on the quantum physics and computing fields, Love said that Microsoft's enterprise customers can look forward to changing their businesses with this new-found technology. Quantum computing can help advance businesses in a variety of ways. It can aid with data analysis, pattern matching, and more.

-J.Jenila(Third Year)

## ARTIFICIALINTELLIGENCE

We report on innovations in Artificial Intelligence (AI) and explore how businesses can take advantage of machine learning, robotics, task automation, and other AI technologies.



## Android user? Beware of new scam that could trick you into downloading bad apps

Android app developers have found clever tactics for tricking users into installing fake apps. Here's how to not get fooled.

If you are an Android user looking to download business apps, beware of malicious app developers disguising themselves as legit sources.

Tricksters are taking advantage of the fact that when searching for apps on Google Play, the app's image and name, along with the developer's name are displayed. These developers are setting their names as fictitiously high download numbers, making users believe the app is popular, Malware Researcher Lukas Stefanko first noted on Welivesecurity. Instead of a developer's name, the title will read "100 Million Downloads," "5,000,000,000+," "Installs 100,000," and more.



Along with inaccurate download counts, malicious developers use key phrases to try and boost credibility. For example, Stefanko referenced phrases like "Legit Apps," "Verified Applications," and "Trusted Developers App" as common occurrences. Some developers even include the widely-known blue check mark symbol, which indicate that the user is "verified," and should therefore be trusted.

However, Google Play does not provide any developer account verification feature, so any application with that badge should not be trusted, Stefanko emphasized. Stefanko found hundreds of fake apps posing as legitimate downloads;

however, most of these apps had no functionality or just displayed advertisements.

Business professionals can protect themselves from these ploys. Stefanko suggests four strategies to make sure you are downloading apps for trusted developers:

- Only look at the number of app installations under the "Additional Information" section at the bottom of the page, that is the official download number on the Google Play site.
- Google Play does not have the blue "verified" check mark symbol in its system. While it does have an "Editor's Choice" badge, that will be located in the top right corner of the application's Google Play page.
- Read the app's user reviews! Oftentimes users who have downloaded a fake app will comment a warning message.
- Lastly, if the app only has a small number of real downloads, or was added within the last few days, wait for other people to download it first and see if it's real.

-M.LogaMeenakshi(ThirdYear)

## IoT

The Internet of Things (IoT) is powering smart devices and smart cities, triggering a massive influx of big data, creating new jobs for data scientists and engineers, and driving a new wave of automation.

## Why blockchain won't transform IoT security

Blockchain holds great promise for many industries, but it is largely incompatible with the Internet of Things, according to a panel of experts at LiveWorx 2018.

By 2020, more than 25% of cyberattacks on enterprises will involve Internet of Things (IoT) devices, though IoT will account for less than 10% of IT security budgets, according to Gartner. While some in the industry have proposed using blockchain to enhance IoT security, a panel of

experts at the LiveWorx 2018 conference disagreed that the distributed ledger technology would radically transform the way IoT devices operate.

Considering the destructive Mirai botnet, it's possible that the world will reach that 25% figure sooner, Joshua Foreman, chief security officer at PTC, said during the panel discussion. The number of devices that are unpatchable with hard coded credentials that exist naked on the internet provide a recipe for disaster, Foreman said.

IoT devices' diversity and lifespan make them strong targets for attack, according to Chris Lord, CTO and co-founder of security firm Armored Things. "When it comes to IoT devices, we have thousands of different operating systems and variants," Lord said during the panel discussion. "That diversity creates all sorts of challenges everyone has different configurations and different ways to patch and manage."

Device lifetimes create further issues, Lord said. Unlike smartphones, which are constantly visible to users who can determine when they need an upgrade, many IoT products are embedded into the environment around us in our cars, buildings, and safety products.



"As soon as they sink into the environment, we no longer know they're there," Lord said. "They get lost and neglected but are still surfaces that can be attacked. In lifecycle management, we need to focus on the tail end, not just the middle maintenance." Enter blockchain, which some have argued will help IoT devices communicate with each other and improve their security.

When determining whether or not to work with blockchain, IoT developers must ask themselves one of the most basic computer science questions,

Foreman said: "Can I already do this with a distributed database?" Often, the answer is yes, he added.

"It's not new technology," Lord said. "Most of what we talk about with blockchain is a better set of patterns for dealing with decentralized or distributed problems. It's not going to change how we deal with things in IoT."

One way that blockchain could be useful is in distributing a policy change across different devices. However, anyone advertising blockchain as a security feature in an IoT device should at this point be met with skepticism, Lord said.

IoT manufacturers also want to bring scale to their devices, said Rob Black, founder and managing principal of Fractional CISO. "When you think about blockchain, it's anything but scale—you're bringing along a huge ledger of transactions," Black said. "Compatibility with blockchain and IoT in today's environment is almost nonexistent."

-D.Jagruthy(Third Year)

## CYBERSECURITY

What's worse than getting hit with a security breach? Getting hit with an easily preventable one.

### **Avoid ransomware payments by establishing a solid data backup plan**

Ransomware is major threat to critical enterprise data, but the risk can be mitigated with an extensive enterprise-wide data backup plan.

A 2018 report from Radware found that 53% of surveyed executives said they had paid cybercriminals the requested ransom after a successful ransomware attack. When you include the cost of paying a ransom with the more traditional costs of data corruption and loss, business enterprises are paying millions of dollars for data recovery.

It is not sustainable situations for any business. To counteracts ransomware and other data breaches, businesses have implemented state-of-the-art preventative security technologies, but

cybercriminals are still getting through. According to the Department of Homeland Security (DHS), the key to defending against ransomware attacks is a systematic backup protocol for all mission-critical data.



## Backup protocol

DHS Alert (TA16-091A) advises businesses and organizations that store critical data and are susceptible to ransomware attacks to:

- Implement a backup and recovery plan for all critical data
- Regularly test backups to limit the impact of a data breach and accelerate the recovery process
- Isolate critical backups from the network for maximum protection if network-connected backups are affected by ransomware

With an all-inclusive data backup plan in place, a business may be able to restore all, or at least most, of the critical data held hostage during a ransomware attack, thus eliminating the need to pay for its release. Of course, there will still be costs involved, but the costs spent on data recovery with backed up data will not line the pockets of malicious cybercriminals.

Data backup for modern enterprises is likely to involve cloud services, offsite data centers, and hybrid systems, the combination of which helps reduce the vulnerability of critical data. It is much more difficult for ransomware to lock out data when it is physically located in a cloud of redundant servers. Organizing backup protocols for an entire enterprise requires extensive planning. A successful data backup policy includes identifying key staff and understanding what should be backed up, when and where it will

be backed up, how often it will be backed up, and how long backups should be kept. It also needs to define a process for confirming the success of all those operations. And those are just the critical elements.

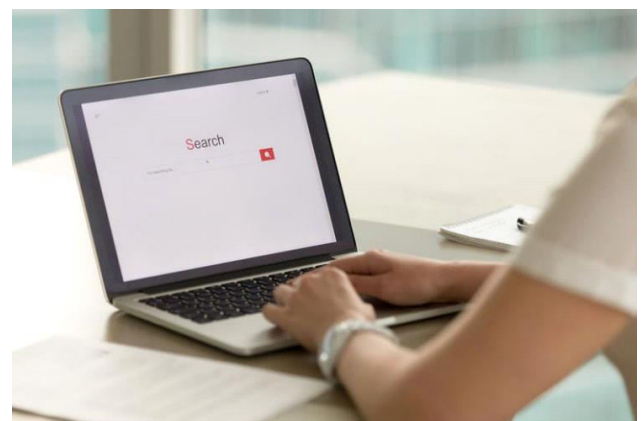
Tech Pro Research, TechRepublic's premium sister site, offers a ready-made Data Backup Policy you can use as a framework for developing a comprehensive policy for your organization. Implementing such a policy could prevent major financial hardship. The Radware report mentioned earlier also revealed that 69% of the surveyed executives have had a ransomware attack in the past year. Your enterprise had better be prepared.

-A.Kanaga Durga(ThirdYear)

## WEBDESIGNING

### 5 common browser security threats, and how to handle them

Web browsers are designed to store information for your convenience, but that information can also fall into the wrong hands. Here are some simple tips for preventing that situation.



The web browser is inarguably the most common portal for users to access the internet for any given array of consumer or business purposes. Innovative advances have allowed many traditional "thick client" apps to be replaced by the browser, enhancing its usability and ubiquity.

User-friendly features such as recording browsing history, saving credentials and enhancing visitor engagement through the use of cookies have all helped the browser become a "one stop shopping" experience

However, the browser also has the potential to betray the user through the very same options which are intended to make life easier since it serves as a ripe target for the theft of confidential data because it holds so many proverbial eggs in its basket.

Security intelligence organization Exabeam conducted some recent research to analyze dozens of popular websites such as Google, Facebook, Amazon, and others to determine what kind of user data is stored when interacting with these entities. They found a significant amount of user information kept both on local storage and in the browser.

## SOME OTHER TIPS FOR PROTECTION:

### 1. Accessing browser history

Your browser history is a veritable map of where you go on the internet and for what purpose. And it's not only possible to tell where you've been, but when you've been there, establishing your behavioral patterns.

Knowing you access certain sites can lead to phishing attacks against you to obtain your credentials for those sites (assuming you haven't stored this information in the browser), establishing your purchasing habits (for instance if you are a football fan and visit NFL sites, your credit card company isn't likely to raise an eyebrow if a slew of charges for football merchandise start showing up on your compromised credit card) or even blackmail if the site(s) in question prove illegal or unethical, or allegations thereof can be made.

### Recommendations:

Clearing the browser cache is a good way to flush potentially damaging information, especially after engaging in confidential activities such as conducting online banking. This can be performed manually or set to do so automatically such as when closing the browser (Google the details for your browser version and operating system to carry out this and the other recommendations as the steps involved may be subject to change). Use incognito mode (private browsing) since no

harvestable data is stored (if you must use a public system, always make sure to do so with incognito mode).

### 2. Harvesting saved login credentials

Saved logins paired with bookmarks for the associated sites you visit are a deadly combination. Two mouse clicks might be all it takes for a criminal to have access to your banking/credit card website. Some sites do use two-factor authentication, such as texting access codes to your mobile phone, but many of them utilize this on a one-time basis so you can confirm your identity on the system you're connecting from. Unfortunately, that system is then deemed trusted, so subsequent access may go entirely unchallenged.

Saved credentials associated with your email account is basically like Kryptonite to Superman in a scenario like this. An attacker who can get into your email can reset your password on almost any other website you access. And keep in mind they might not need to be on your system to do so - if they obtain your email address and password they can work at leisure from any other system they choose.

Just taking a series of screenshots (or even utilizing the camera on a mobile phone) can allow an attacker on your system to record all of your saved passwords. Firefox lets you view these quite easily. While Chrome at least requests your logon password to do so, as stated resetting this is quite easy with administrative access (which can be simple to obtain thanks to password reset utilities such as Offline NT Password and Registry Editor).

### Recommendations:

Don't save credentials in the browser. Instead, take advantage of free password managers such as KeePass or Password Safe to store passwords (never write them down) via a central master password. These password managers can securely store all your website passwords.

A password manager can even access a saved URL and login for you, adding to the convenience and security of your information.

### 3. Obtaining auto fill information

Autofill information can also be deadly. Chrome can save your home address information to make it easier to shop online, but what if your device fell into the wrong hands? Now an attacker knows where you live - and probably whether you're home.

### 4. Analyzing cookies

Cookies (files stored locally which identify users/link them to sites) are another potential attack vector. Like the browsing history, they can reveal where you go and what your account name might be.

#### Recommendations:

Disabling cookies is touted as a potential solution, but this has been a problematic "fix" for years since many sites depend on cookies or at least severely limit your functionality (or possibly annoy you with nagging prompts) if these are turned off.

Instead, purging cookies periodically can help protect you, though be prepared to enter information repeatedly as prompted by websites.

### 5. Exploring the browser cache

The browser cache involves storing sections of web pages for easier access/loading on subsequent visits, which can outline where you've been and what you've seen. Malware can be tailored to prey upon cache data as well.

Exabeam also considered location history and device discovery to be risky elements in their blog post, stating these could expose user location and other devices used.

Take advantage of two-factor authentication where possible and set up recovery accounts where possible for your website accounts, and specify your mobile number and security questions for password resets. Be on the lookout for suspicious activity like emails about new accounts or password resets you didn't request.

Some sites like Facebook can tell who is currently logged into your account (go to Settings then

Security and Login), so check these details periodically - especially if anything out of the ordinary is going on.

Exabeam also recommends utilizing anti-malware software which is routinely updated along with several browser-related options (Google your browser and operating system version for the specific details on how to enact these as settings may change).

Users should also consider changing browser settings to further protect their privacy, or at least analyzing them to be aware of what options are currently enabled/disabled. There are guides online for Chrome, Firefox, Internet Explorer, Safari and Opera.

-N.K.K.KrishnaChand(ThirdYear)

## TIMELINE

## ACHIEVEMENTS

### MINI PROJECT

Mini Project contest on "INNOVATION FOR INCLUSIVE GROWTH" in association with Wave Plus Softech, Madurai was held on 02.04.18, Students of Third Year Participated and was awarded for their Performance



## LECTURES

## Out of the Box

### AWARENESS PROGRAM

An Awareness Program on “Celebrating Life” was Conducted by Youth Red Cross in association with Red Ribbon Club was held on 21.03.18 by Mr.M.Vettai Selva, Counsellor, Corporation Hospital, Madurai



### JAVA TRAINING

Three days **Java Training** was conducted for Third Year students by SILICON SOFTWARE SERVICE and the Student gained knowledge about Java Programming



## The Sound of Trees

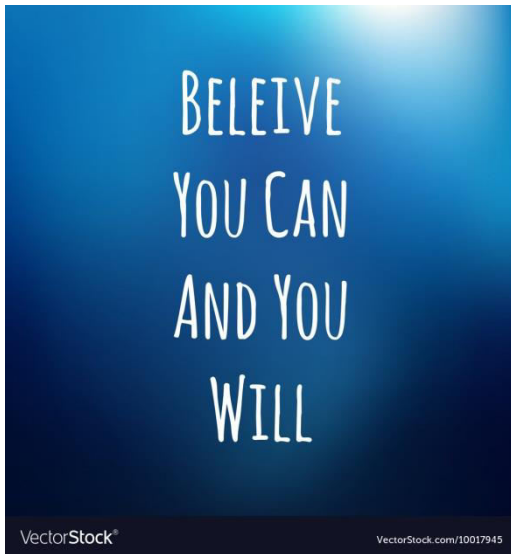
I wonder about the trees.  
Why do we wish to bear  
Forever the noise of these  
More than another noise  
So close to our dwelling place?



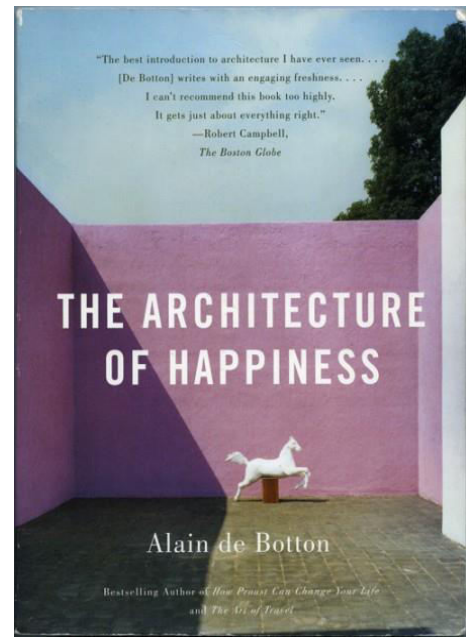
We suffer them by the day  
Till we lose all measure of pace,  
And fixity in our joys,  
And acquire a listening air.  
They are that that talks of going  
But never gets away;  
And that talks no less for knowing,  
As it grows wiser and older,  
That now it means to stay.  
My feet tug at the floor  
And my head sways to my shoulder  
Sometimes when I watch trees sway,  
From the window or the door.  
I shall set forth for somewhere,  
I shall make the reckless choice  
Some day when they are in voice  
And tossing so as to scare  
The white clouds over them on.  
I shall have less to say,  
But I shall be gone.

-S.AnusuyaDevi(Third Year)

## BELIEVE



philosophy and psychology of architecture, which aims to change the way we think about our homes, streets and ourselves.



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Just really, really believe in what you're trying to do. Don't let people alter that. Let people advise you and lead you down paths to make smart business decisions. But trust your instinct and trust that overwhelming drive that made you put all your dreams and everything on the line.

## The Architecture of Happiness

One of the great, but often unmentioned, causes of both happiness and misery is the quality of our environment: the kind of walls, chairs, buildings and streets we're surrounded by.

And yet a concern for architecture and design is too often described as frivolous, even self-indulgent. *The Architecture of Happiness* starts from the idea that where we are heavily influences who we can be – and argues that it is architecture's task to stand as an eloquent reminder of our full potential. Whereas many architects are wary of openly discussing the word beauty, the book has at its centre the large and naïve question: 'What is a beautiful building?' It amounts to a tour through the