



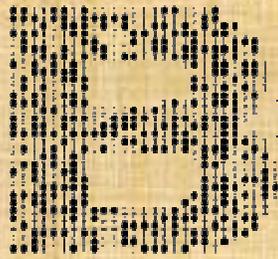
Vidya Vikas Education Trust's

Universal College of Engineering

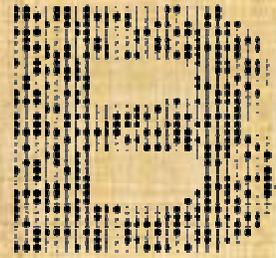
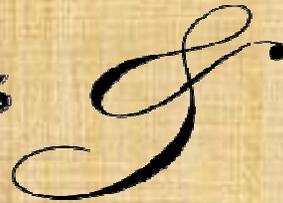
Gujarati Linguistic Minority Institution

“Accredited B+ grade by NAAC”

Issue 16 | Edition 3 | November 2019



ITS



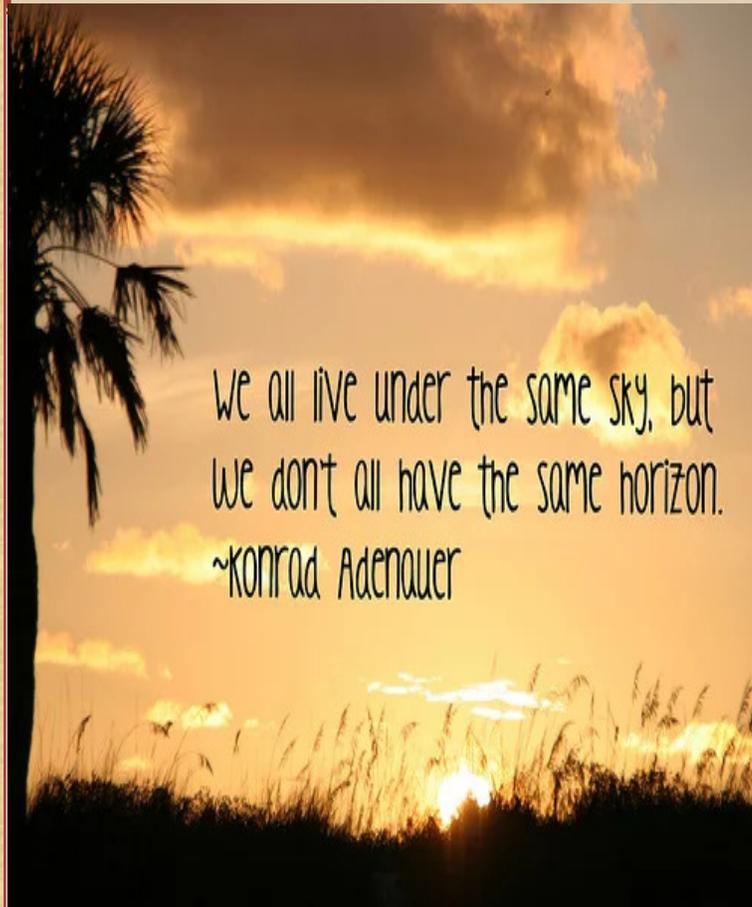
YTES

An Initiative By



Department of Information Technology

#Satyavachan



We all live under the same sky, but
we don't all have the same horizon.
~Konrad Adenauer

C O N T E N T S

- 1 | Technical Article
- 2 | Non- Technical Article
- 3 | Solar Workshop
- 4 | Tahuko
- 5 | Upcoming Events

DESIGNED BY:

Jesleena Gonsalves

Oracle Autonomous Linux: A Self Updating, Self Patching Linux Distribution for Cloud Computing

Automation is the growing trend in the IT industry. The aim is to remove the manual interference from the repetitive tasks. Oracle has taken another step into the automation world by launching Oracle Autonomous Linux that is surely going to benefit the IoT and Cloud Computing industry.

“Oracle Autonomous Linux: Less Human Intervention, More Automation”

On Monday, Larry Ellison, the legendary co-founder of Oracle, took the stage at the Oracle OpenWorld conference in San Francisco. He announced a new product: the world’s first autonomous Linux. This is the second step in Oracle’s march towards a second-generation cloud. The first step was the Autonomous Database released two years ago.

The biggest feature that Oracle Autonomous Linux is reduced maintenance costs. According to Oracle’s site, Autonomous Linux “uses advanced machine learning and autonomous capabilities to deliver unprecedented cost savings, security, and availability and frees up critical IT resources to tackle more strategic initiatives”.

Autonomous Linux can install updates and patches without human interference. These automatic updates include patches for the “Linux kernel and key user space libraries”. “This requires no downtime along with protection from both external attacks and malicious internal users.” They can also take place while the system is running to reduce downtime. Autonomous Linux also handles scaling automatically to ensure that all computing needs are handled.

Ellison highlighted how the new autonomous would improve security. He mentioned in particular how “*Capitol One data breach*” occurred because of a bad configuration. He said “One simple rule to prevent data theft: Put your data in an autonomous system. No human error, no data loss. That’s the big difference between us and AWS.”

Interestingly, Oracle is also aiming this new product to compete with IBM. Ellison said, “If you’re paying IBM, you can stop.” All Red Hat applications should be able to run on Autonomous Linux without modification. Interestingly, Oracle Linux is built from the sources of Red Hat Enterprise Linux.

It does not appear that Oracle Autonomous Linux will be available for anyone outside of the enterprise market.

Thoughts on Oracle Autonomous Linux

Oracle is a big player in the cloud services market. This new Linux product will allow it to compete with IBM. It will be interesting how IBM responds, especially since they have a new influx of open-source smarts from Red Hat.

If you look at the numbers, things are not looking good for either IBM or Oracle. The majority of the cloud business is controlled by Amazon Web Services, Microsoft Azure, and Google Cloud Platform. IBM and Oracle are somewhere behind them. IBM bought Red Hat in an attempt to gain ground. This new Autonomous Cloud initiative is Oracle’s move for dominance (or at least attempt to gain a larger market share). It will be interesting how many companies buy into Oracle’s system to become more secure in the wild west of the internet.

I have to mention this quickly: when I first read about the announcement, all I could think was, “Well, we are one step closer to Skynet.” If we let technology think for itself, we are just inviting an android apocalypse.

Top 10 Indian Innovative Startups of 2019

There is no denying fact, that startup is the buzzword of the day. The last few years have witnessed the development of many startups around the world with India being no exception.

India has the world's largest youth population of the world. As per Bloomberg News analysis, "India is likely to have the world's largest workforce by 2027, with a billion people aged between 15 and 64."

With the help of government of India's various startup encouragement programs, Entrepreneurship is growing at a rapid rate in India. India has achieved the spot of third largest startup base in the world. As per Nasscom, "India will be home to 10,500 startups by 2020".

Let's explore some of the out of the box startup ideas in India.

1) Bolt

Bolt has come up with world's first small mobile phone charger for motorbikes. Founded by Satyajee Mohanty and Ronak Kumar Samatray, this product has enabled users to quickly charge their phones whilst riding as well as with the help of the Bolt Riders App they can track the entire ride, total distance covered, average speed, etc. They have also inbuilt a unique detachable design which prevents theft or any misuse of the device.

It has already become popular product on ecommerce platforms such as Flipkart and Amazon. It is achieving sales of about 350 units per month and are aiming to increase the strength of the dealers extensively in the coming months.

2) Chaayos

This startup explores India's everlasting love for tea. They launched their first tea café on November 2012 and there has been no looking back since then. At present they have around 53 cafes operating in six cities. The startup plays well with the Indian taste buds with lip smacking snacks that we all prefer with tea.

Customer repeat rate adds a lot to their business. Who thought our age old chai can make so much money?

3) Urban Clap

UrbanClap has become India's first online service platform. It operates in six cities and works on demand services. Earlier times, it was difficult to find reliable service providers for home, like carpenters and plumbers etc. But with Urban Clap this has come as a huge relief.

The sheer luxury of getting all the needed services with one click from your phone has made UrbanClap a huge success in the market. As per UrbanClap, their salon services got huge demand from the consumers.

4) Wow Momo

Who would have thought that momos can become such a huge hit? Started from Kolkata with a mere investment of Rs 30,000 by the founders, Sagar Daryani & Binod Kr. Homagai, Wow Momo has become the fastest growing food chain in India. They offer a variety of momos and other Tibetan dishes. Wow Momo is operating in cities Delhi, Bengaluru, Chennai, Kochi, Noida and Pune.

5) Passiton

This startup is unique in its offerings and in India's first free stuff website. It helps you to donate your unwanted items like, books, clothes, furniture, electronic gadgets to needy people and organizations using them as a platform. Their purpose is to provide an online platform to the general public to connect with the needy and make donation an easy process.

6) TrulyMadly Matchmakers Pvt Ltd

This startup has successfully built an online platform for the Indian millennials to meet new people. They have developed a compatibility matching algorithm that shortlists highly compatible matches and makes it easier for them to meet each other. It uses trust built score to verify its users. We all know how finding the right 'one' is always in our priority list. Hence, this startup made use of this and became widely popular with a huge number of users.

7) CashKaro.com

Cashkaro.com is an app that provides its users up to 50% cashback on their online shopping in over 1000 websites when they shop via CashKaro.com. The cashback is paid to the user's bank account in real cash.

As we do most of our shopping via online these days hence, availing an offer from sites like CashKaro.com is very attractive indeed. CashKaro.com has seen huge success with around 7000 transactions per day and over 10 lakh members. They have around 50 lakh page views per month.

8) Inshorts

An online platform for news, Inshorts offers selected news stories of the day in 60 words across 10 news categories. Its primary agenda is to keep users informed on news around various topics like politics, business, sports etc. The startup now primarily offers news in English and also in Hindi. Available in IOS and Apple, Inshorts is a huge success among its users.

9) NestAway

This startup gives respite to the ever moving young generation of the country. Migrating from hometown to other cities for prospective employment opportunities is a common thing today. However, getting a proper accommodation is a hassle. Especially for bachelors who want to find a decent accommodation without spending too much money.

NestAway offers furnished homes available for rent without you having to run after brokers or convince the landlord regarding your character so that they take you in as their tenant. NestAway offers everything from finding, to move in at the house via their app. The same applies for move out.

10) EduKart

This startup provides a platform to the students to look for any courses online and gets them to enroll in degree, diploma, certificate and entrance coaching courses. It helps students in their education. Edukart plans to add more courses and course providers in its portfolio and has become a popular online education provider in the country.

Ref: <https://www.noveloffice.in/blog/top-10-indian-innovative-startups-of-2019/>

Mrs. Rovina D'Britto

Daily exposure to blue light may accelerate aging, even if it doesn't reach your eyes

Prolonged exposure to blue light, such as that which emanates from your phone, computer and household fixtures, could be affecting your longevity, even if it's not shining in your eyes. New research at Oregon State University suggests that the blue wavelengths produced by light-emitting diodes damage cells in the brain as well as retinas.



Jaga Giebultowicz, a researcher in the OSU College of Science who studies biological clocks, led a research collaboration that examined how flies responded to daily 12-hour exposures to blue LED light -- similar to the prevalent blue wavelength in devices like phones and tablets -- and found that the light accelerated aging.

Flies subjected to daily cycles of 12 hours in light and 12 hours in darkness had shorter lives compared to flies kept in total darkness or those kept in light with the blue wavelengths filtered out. The flies exposed to blue light showed damage to their retinal cells and brain neurons and had impaired locomotion -- the flies' ability to climb the walls of their enclosures, a common behavior, was diminished.

"The fact that the light was accelerating aging in the flies was very surprising to us at first," said Giebultowicz, a professor of integrative biology. We hypothesized that light was regulating those genes. Then we started asking, what is it in the light that is harmful to them, and we looked at the spectrum of light. It was very clear cut that although light without blue slightly shortened their lifespan, just blue light alone shortened their lifespan very dramatically.

Natural light, Giebultowicz notes, is crucial for the body's circadian rhythm -- the 24-hour cycle of physiological processes such as brain wave activity, hormone production and cell regeneration that are important factors in feeding and sleeping patterns.

"But there is evidence suggesting that increased exposure to artificial light is a risk factor for sleep and circadian disorders," she said. "And with the prevalent use of LED lighting and device displays, humans are subjected to increasing amounts of light in the blue spectrum since commonly used LEDs emit a high fraction of blue light. But this technology, LED lighting, even in most developed countries, has not been used long enough to know its effects across the human lifespan."

"Human lifespan has increased dramatically over the past century as we've found ways to treat diseases, and at the same time we have been spending more and more time with artificial light," she said. "As science looks for ways to help people be healthier as they live longer, designing a healthier spectrum of light might be a possibility, not just in terms of sleeping better but in terms of overall health."

In the meantime, there are a few things people can do to help themselves that don't involve sitting for hours in darkness, the researchers say. Eyeglasses with amber lenses will filter out the blue light and protect your retinas. And phones, laptops and other devices can be set to block blue emissions.

"In the future, there may be phones that auto-adjust their display based on the length of usage the phone perceives," said lead author Trevor Nash, a 2019 OSU Honors College graduate who was a first-year undergraduate when the research began. "That kind of phone might be difficult to make, but it would probably have a big impact on health."

Ref: <https://www.sciencedaily.com/releases/2019/10/191017101253.htm>

Mrs. Jesleena Gonsalves

Digital Iris : VPS 19 Glasses Eye Hyper Tracking

Digital Iris represents the first complete digitalization of human viewing behavior, because this technology registers both conscious and involuntary eye movements. This makes it possible to read the wearer's subconscious reactions for the first time. Our goal is to develop behavior prediction models. The eyes are the interface, the mind the selector. Up to now you have always had to tell an interface what you want or intend to do, but in future it will be able to recognize this for itself. A machine which I can read, and which reads me: that is the future of communication and it is our company's declared goal.

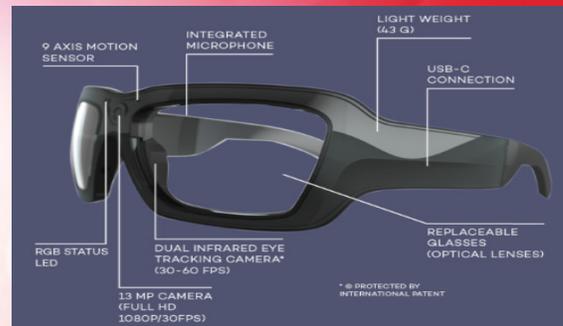
In the era of the digital revolution, pushing the smart wearable's to the forefront, bridging the gap between the human being and digital or other machines is the key of future applications. The existing technical solutions are still limited in their impact as they are unable to react to natural human behavior. The biggest disruptive digitizing step aims at detecting and interpreting directly individual behavior in conjunction with the situational environment – wherever, whenever, in whatever situation -, without the need of additional interactions with a device. Eye Tracking (ET) technology measures the eye activity to better understand sight, perception, reaction, and emotions, providing a complete bi-directional interaction with the environment. Existing head-worn ET solutions are only able to work in artificial, controlled lab environments. Viewpoint system, based on its patented Eye Hyper Tracking (EHT) system, is the only company able to provide a solution that works under uncontrolled real-life environments. “Digital Iris” is the definitive tool to integrate the human being into the digital world. It represents a disruptive leap forward, providing total robustness, reliability and every-day-usability and allowing its use in professional applications whatever the conditions are. The disruptive leap is based on existing know-how, coming from the embedded gaze image processing previously used in the safety-critical automotive world by Viewpoint system's experts. Adding to a head worn, functionally robust EHT a robust Augmented Reality element, Digital Iris will generate real-time useful information based on users' situational environment and reactions. This intuitive ‘Human Machine Interface’ will immerse the user into a complete digital loop, opening up complete new and disruptive applications in industry, mobility and medicine, among others.

EYE HYPER-TRACKING IS TAKING INDUSTRY BY STORM

Your industry now has a new communication tool: the eyes. And that's a revolution. Because now employees can see with the eyes of others. Consider the implications for training, remote maintenance, the inclusion of experts at other locations and many more scenarios. Shorten downtimes, save on personnel costs, offer unimagined levels of service and utilize know-how company-wide as never before.

IDEAL FOR

- Remote support
- Service level agreements
- Maintenance process as video instead of manual
- Factory acceptance tests (FATs)
- Workplace organization and ergonomics
- Service maintenance and audit checks



Ref: <https://viewpointssystem.com/en/products-vps19/>

Mrs. Aditi Malkar

NoSQL vs. Relational Databases

The Big Picture Differences Between SQL and NoSQL The Language

Think of a town - we'll call it Town A - where everyone speaks the same language. All of the businesses are built around it, every form of communication uses it. In short, it's the only way that the residents understand and interact with the world around them. Changing that language in one place would be confusing and disruptive for everyone.

Now, think of another town, Town B, where every home can speak a different language. Everyone interacts with the world differently, and there's no "universal" understanding or set organization. If one home is different, it doesn't affect anyone else at all.

This helps illustrate one of the fundamental differences between SQL (relational) and NoSQL (non-relational) databases, and this distinction has big implications. Let's explain:

SQL databases: SQL databases use structured query language (SQL) for defining and manipulating data. On one hand, this is extremely powerful: SQL is one of the most versatile and widely-used options available, making it a safe choice and especially great for complex queries. On the other hand, it can be restrictive. SQL requires that you use predefined schemas to determine the structure of your data before you work with it. In addition, all of your data must follow the same structure. This can require significant up-front preparation, and, as with Town A, it can mean that a change in the structure would be both difficult and disruptive to your whole system.

NoSQL databases: NoSQL databases, on the other hand, have dynamic schemas for unstructured data, and data is stored in many ways: They can be column-oriented, document-oriented, graph-based or organized as a Key-Value store. This flexibility means that:

- You can create documents without having to first define their structure
- Each document can have its own unique structure
- The syntax can vary from database to database, and
- You can add fields as you go.

The Scalability

In most situations, SQL databases are vertically scalable, which means that you can increase the load on a single server by increasing things like CPU, RAM or SSD. NoSQL databases, on the other hand, are horizontally scalable. This means that you handle more traffic by sharding, or adding more servers in your NoSQL database. It's like adding more floors to the same building versus adding more buildings to the neighborhood. The latter can ultimately become larger and more powerful, making NoSQL databases the preferred choice for large or ever-changing data sets.

The Structure

SQL databases are table-based, while NoSQL databases are either document-based, key-value pairs, graph databases or wide-column stores. This makes relational SQL databases a better option for applications that require multi-row transactions - such as an accounting system - or for legacy systems that were built for a relational structure.

Some examples of SQL databases include MySQL, Oracle, PostgreSQL, and Microsoft SQL Server. NoSQL database examples include MongoDB, BigTable, Redis, RavenDB, Cassandra, HBase, Neo4j and CouchDB.

When to Use What

Relational databases have existed for more than 40 years now, and they work well. There are specific use cases, however, where a software professional might use a NoSQL database over a relational one. Some of those reasons are:

- Relational databases are highly available and highly consistent. Thereby running atomic operations on them is a piece of cake and they run very well. Hence, if you are looking for normal CRUD operation type websites, a relational database is still a solid option to choose.
- CAP theorem stands for C – Consistency, A — Availability, P — Partitioning (or Scalability) and states that having all three properties at the same time is not possible, so at the best, you can get two properties from these and not the third one.
- The point mentioned above is the key reason for the existence of NoSQL databases like MongoDB or Cassandra. These databases provide excellent support for horizontal scalability. They do lack a bit on the principle of consistency as most of them don't support distributed transactions. They also don't have joins exactly like relational databases, and these are the key reasons why they scale so well horizontally.
- Another reason for the usage of NoSQL databases is their developer friendliness. DB's like MongoDB are document databases where the data is stored as a JSON, which is highly compatible with most web user interfaces (read 'Single page Java Apps') and has excellent tooling support.
- Relational databases have a strict schema for the data storage. Through the use of 'alter' statements, the schema can be changed, but it has its impact on the existing code. The NoSQL databases, on the other hand, support easy schema changes on the fly without affecting any existing code.

How Do NoSQL Databases Scale Horizontally?

There are 2 key approaches:

1. **Auto-Sharding:** This is what is followed by Google's Bigtable. It basically assigns a range of values to a partition .So when a certain value falls within a certain range, the database knows which partition to look in. It is somewhat similar to a hash table bucketing concept.
2. **Consistent Hashing:** The other approach is consistent hashing, which is followed by Dynamo DB in Amazon. It prepares a hash of machines in a circular fashion, and if a certain machine fails in the circle, the database knows where to look for the next record in this circle of machines.

Putting It All Together

All database systems are not created equal and have certain advantages, disadvantages, strengths, and weaknesses. At a high-level, the following should be carefully considered and determined in an order something like the following:

- Identify the type (or combination) of data to be stored, queried, and updated, and the preferred way to model the data if applicable
- Decide whether transactional and ACID guarantees are a mandatory requirement
- Determine if horizontal scalability (multiple distributed nodes) is a priority, and if so, prioritize between the tradeoffs outlined by CAP and PACELC
- Ascertain if replication and/or horizontal partitioning is a priority
- Decide any other functional and nonfunctional database requirements and priorities such as those described earlier in this article
- Determine if an open source database is an option, or if a vendor-backed solution with an SLA is required
- Identify any cost constraints and/or budgets

Ref: 1. <https://www.xplenty.com/blog/the-sql-vs-nosql-difference>

2. <https://dzone.com/articles/nosql-vs-relational-databases-when-to-use-what>

Mr. Sandesh Patil

Top 06 Trending Technologies To Master In 2019

1) Artificial Intelligence (AI):

Artificial Intelligence Training – Explore the Curriculum to Master AI and Deep Learning. AI existed even before the internet was born, but it is now that the data processing and compute power backbone became strong enough to sustain an entire technology by itself. AI is everywhere today, from your smartphones to your cars to your home to your banking establishment. It is the new normal, something the world cannot do without.

2) Blockchain:

Blockchain Training – Explore the Curriculum to Master Blockchain. This is the tech that powers bitcoins, the whole new parallel currency that has taken over the world. Interestingly, blockchain as a technology has far-reaching potential in everything from healthcare to elections to real estate to law enforcement. Understand how block-chain works and your career is as sorted as the secure ledger this tech is based on!

3) Augmented Reality and Virtual Reality:

Virtual is real! VR and AR, the twin technologies that let you experience things in virtual that are extremely close to real are today being used by businesses of all sizes and shapes. But the underlying technology can be quite complex. Medical students use AR technology to practice surgery in a controlled environment. VR on the other hand, opens up newer avenues for gaming and interactive marketing. Whatever your interest might be, AR and VR are must-have skills if you want to ride the virtual wave!

4) Cloud Computing:

AWS Solution Architect Training – Explore the Curriculum to Master AWS. This one is a veteran. Most other technologies on this list are alive only because of the proliferation of cloud computing. By allowing companies to save money, and users to simplify their computing needs, Cloud Computing is one of the most trending technologies that will stay popular in 2019, without a doubt.

5) Angular and React:

Angular and React Training – Explore the Curriculum to Master Angular and React. OK, now we are getting into core tech. Angular and React are JavaScript based Frameworks for creating modern web applications. Using React and Angular one can create a highly modular web app. So, you don't need to go through a lot of changes in your code base for adding a new feature. Angular and React also allows you to create a native mobile application with the same JS, CSS & HTML knowledge. Best part – Open source library with highly active community support.

6) DevOps:

DevOps Training – Explore the Curriculum to Master DevOps tools. This is the odd one out in the list. It is not a technology, but a methodology. DevOps is a methodology that ensures that both the development and operations go hand in hand. DevOps cycle is picturized as an infinite loop representing the integration of developers and operation teams by: automating infrastructure, workflows and continuously measuring application performance.

Mr. Jigar Chauhan

Data Scientist vs Data Engineer

The increase of data collection requires professionals who are able to leverage the mass amount of information to turn them into some form of advantage for the company or organization behind the data. Often times, there is some confusion about the different job titles in the data industry. After all, data scientists and data engineers sound pretty similar. However, there is a big difference in the work and skill these three job titles do and need. So what is actually the difference between a data scientist and data engineer?

How to compare?

Both professions have essentially the same goal: to help organizations optimize how they use data. Professionals in either field receive a lot of the same training and have many of the same skills. They differ in how they apply those skills and in the specialized training they pursue.

How are they different?

There are many similarities and often skill overlap between data engineers and data scientists. However, the main difference is that data engineer's skills will lean more towards programming and software engineering to build highly scalable data products, while data scientists will focus more on advanced statistical analysis to pull insights out of the data and bring value to the business. Think of big data as a skyscraper. Data engineers are the ones who design and build the structure. Data scientists are the ones who work inside of it.

- Data engineers are responsible for collecting and integrating data as comprehensively as possible. Without data engineers, data would just be a diffuse mass of information that would be impossible to search for insights. A data engineer is responsible to set up a system for storing and distributing data.
- Conducting that search is the job of data scientists. They are the ones who interact with data to create reports, fulfill queries, identify trends, and detect anomalies. Data scientists rely on the infrastructure of big data, but they are not responsible for it. Instead, they work with executives and decision-makers to turn data into actionable insights. In short, a Data Scientist is mostly involved in the statistical analysis of data. This job needs a ton of experience because every single data set out there looks different.

Careers in both the fields

Companies searching for a big data solution often rely on recruiting. The question is who to hire: a data scientist or a data engineer? The answer depends on what state your data is in. If you're in the early stages, a data engineer is more helpful. If you're farther along, you probably need a data scientist. Whether you are interested in analyzing and leveraging information as a data scientist or constructing the systems that enable the collection and processing of those numbers as a data engineer, big data provides exciting new opportunities for engineers with a background in data.

Job titles which you can expect for these two data professions

This one is really important and interesting. data engineers are not always called "Data Engineers" and data scientists are also not always called "Data Scientist". Whenever you hear job titles that fit the one of a data scientist but is not specifically called "Data Scientist", then you can easily identify the job's required skill set by knowing if the job belongs to the data engineering, or data scientist profession.

Ref: <https://medium.com/@pateljuhi027/data-scientist-vs-data-engineer-679ffd395fb0>

Mrs. Yogita Mane

How to deal with exam stress???



Exam stress affects most students in varying ways. It is important to manage this stress and find little ways of helping to eliminate the risk of burnout. For some students, exams can be a breeze; revision is second nature to them and they could ace an exam with their eyes closed. But for others, sweaty palms and heart palpitations are just a part of the territory, and it seems that nothing is more impossible than sitting down and revising. Here are some handy tips that can help to dissipate stress and make sure you can get through exam season.

1. Take regular breaks and schedule in fun things to look forward to

Even the most intense exam timetables will allow a little time for a study break. Spending a little time away from the books will leave you feeling more refreshed and relaxed the next time you revise.

2. Exercise and get outdoors

Easily one of the most frustrating things about exam season is that it seems to occur just as the weather brightens up. Use this to your advantage and go out for a walk, or a run, or head to the gym or swimming pool.

3. Don't (always) listen to others

As the old saying goes: "comparison is the thief of joy". While it is helpful to discuss topics with fellow students and often to revise together, try not to compare other peoples' revision to your own.

4. Speak to someone

If the stress gets to a point where it is overwhelming, and is affecting your day-to-day life, try and speak to someone about it.

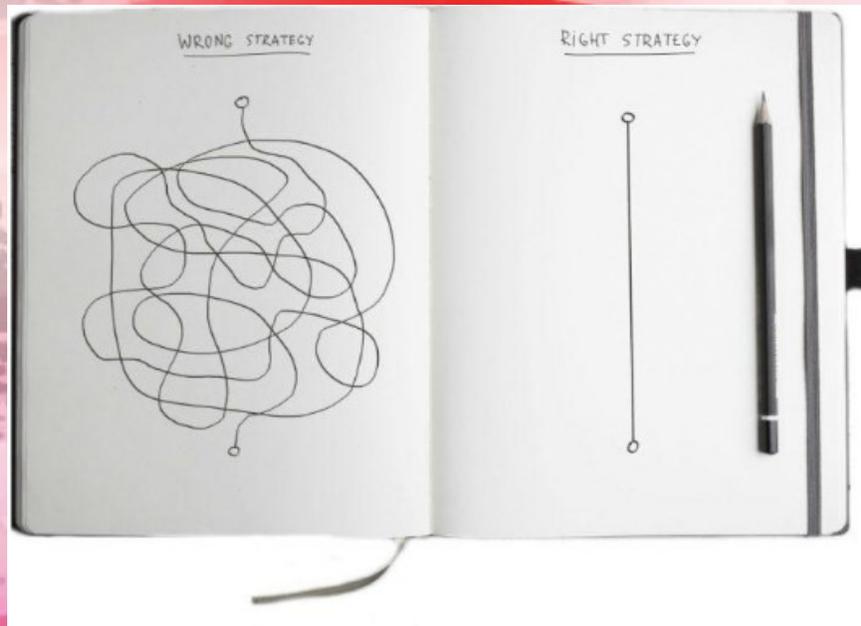
10 quick ways to help eliminate exam stress

- Watch a film, a TV show or listen to a podcast or comedian that makes you laugh.
- Drink some herbal tea or a hot chocolate. It's a well known fact that hot drinks are known to soothe the soul (avoid too much caffeine though!).
- A shower or a bath can help to relieve stress.
- Cook or bake something.
- Get some sleep.
- Keep things in perspective.
- Avoid other stressed people.
- Avoid the exam "post-mortem". You don't need to know how other people fared in the exam.
- Be flexible.
- Write down everything you feel like you need to do and try and tick one thing off.

Ref: <https://www.timeshighereducation.com/student/advice/how-deal-exam-stress#survey-answer>

Mrs Jesleena Gonsalves

Simplicity is the Key to Effective Leadership



Simplicity is not something you find or something you do, simplicity is a way of thinking and it takes discipline. Leadership is the ability to influence people; to get them to act together and on time; to provide direction and instill confidence. Great leaders understand that leadership involves taking the collective, their people and team on the same journey as themselves and making it as easy as possible for people to follow. Often, great leaders espouse the principle that they don't expect anyone to do anything they would not do themselves.

These men and women consult widely, listen carefully, define clearly and act decisively. They know clear thinking and solutions, that can be understood, are contagious amongst their people, and they also know that the opposite is true.

Leaders throughout history generally fallen into one of two categories: those whose goal is to see their people achieve the very best outcomes possible by delivering absolute clarity, transparency and simplicity in what they say and do; and those who seek to obfuscate, confuse and generally keep their people in the dark are those who are often either insecure in their leadership, or who have hidden and perhaps ulterior agendas.

“Great leaders are almost always great simplifiers, who can cut through argument, debate and doubt, to offer a solution everybody can understand.” — Colin Powell

Ref: <https://tegze.eu/simplicity-is-the-key-to-effective-leadership/>

Mrs. Aditi Malkar

Optimism and the Power of Positive Thinking

The Definition of Optimism

Optimism comes from the Latin word *optimus*, meaning "best," which describes how an optimistic person is always looking for the best in any situation and expecting good things to happen. Optimism is the tendency to believe, expect or hope that things will turn out well. Even if something bad happens, like the loss of a job, an optimist sees the silver lining. For me, getting laid off was the catalyst that allowed me to start my own business. As I packed up my office, my mind was already whirling with the possibilities ahead. Without that push, I may never have made the leap to self-employment. Losing my job was a good thing after all.

Happiness through Positive Thinking

Being an optimist or a pessimist boils down to the way you talk to yourself. Optimists believe that their own actions result in positive things happening, that they are responsible for their own happiness, and that they can expect more good things to happen in the future. Optimists don't blame themselves when bad things happen. They view bad events as results of something outside of themselves. I didn't blame myself for losing my job, but saw it as a business decision that had nothing to do with me personally.

Pessimists think the opposite way, however. They blame themselves for the bad things that happen in their lives and think that one mistake means more will inevitably come. Pessimists see positive events as flukes that are outside of their control—a lucky streak that probably won't happen again.

Optimists tend to share several other positive characteristics that increase overall happiness and promote health, while reducing depression and chronic stress:

- They think about, reflect on, and emphasize the good things in life.
- They are grateful and thankful for all their blessings.
- They don't complain when something bad happens.
- They feel that nothing can hold them back from achieving success and reaching their goals.
- They believe in abundance.
- They are confident that the world offers plenty of opportunities for everyone to succeed.

The Power of Positive Thinking: Change Your Thinking, Change Your Life

Luckily, you can change your thinking patterns over time. Even a pessimist can become an optimist with enough practice! All you need to do is to reframe how you define events. Instead of dwelling on the bad experience, analyze it to figure out what good can come of it.

Optimism is a skill of emotional intelligence, which translates to a better career and greater success in life. Life is too short to be miserable, so start turning your thinking around! The **power of positive thinking** can advance your prospects for work, relationships and other life experiences.

Ref: https://www.sparkpeople.com/resource/wellness_articles.asp?id=835

Mrs. Rovina D'britto

Solar Lamp Assembly Workshop

Around 125 students in Vidya Vikas Education Trust's Universal College of Engineering were taught to make Solar Lamps at a Workshop organized by The Unnat Bharat Abhiyan (UBT) where students were given Hands on experience on assembling a Solar Lamp.

The Workshop was conducted on 2nd October, 2019 to commemorate 150 years of Mahatma Gandhi Jayanti all over the world in 180 countries, targeting 1 million students who will be 'solar ambassador' of the world.

The Workshop was conceptualized by IIT Mumbai under Unnat Bharat Abhiyan (UBT) of Government of India. In this Workshop students were made aware about the importance of Solar Urja (Energy) and its sustainability.

Eight teaching faculties of Universal College of Engineering acted as Trainers to teach students assembling of Lamps.

Among 125 students seven students of Department of Information Technology actively participated in the Workshop.

Innovation Cell under Department of Electronics and Telecommunication extended their support in conducting the workshop successfully.



Tahuko 2019

Navratri is one of the major and important festivals, celebrated to worship the Goddess Durga. It is essentially a nine day festival where different nine forms of the Devi Durga (Goddess) are worshipped. The most visible is group dances from villages to towns called Garba accompanied by live orchestra, seasonal raga or devotional songs. It is a folk dance, where people of different background and skills join and form concentric circles. The circles can grow or shrink, reaching sizes of 100s, sometimes 1000s of people, dancing and clapping in circular moves, in their traditional costumes, at the same time. The garba dance sometimes deploys dandiyas (sticks), coordinated movements and striking of sticks between the dancers, and teasing between the genders.

Hence, like the past years, this year too Universal College Of Engineering celebrated Navratri in a huge manner. This year, the annual Navratri celebration - 'Tahuko' was celebrated on the 7th day of Navratri, i.e on 5th of October 2019. The whole college participated in its celebration. All the students & professors from all the streams were present. This year some of the experts in the dance form - Garba among the students conducted a workshop on Learning the basics of 'Garba'.

The day started with the traditional Aarti, which is a Hindu religious musical ritual of worship, a part of puja, in which light (usually from a flame) is offered to the Goddess - Durga. After the aarti the traditional dance - Garba begun. All the female students & faculties wore traditional Indian attires, among which some chose to wear the traditional 'Chaniya Choli' whereas the male students & faculties wore Traditional kurtas or kafni pyjamas with a Ghagra. The colors of the beautiful traditional wear made our college shine bright. The end of the event, Some of the best performers were chose to compete with each other among which one would be selected as the best. Other than the main - Miss Tahuko & Mr. Tahuko awards, there were many more awards to encourage more participation. The event was graced by the Alumni as well. One of our ex-students from IT won the award amongst the Alumni. Many professors also compete among which one of them won the competition. Other awards included selecting the best dressed as well.

The beauty of Tahuko is that many of the participants didn't belong to the Gujarti community, yet some among them were the best performers of the event. People of all different language speaking communities, came together to enjoy this auspicious festival.



Upcoming Event

Department of Information Technology is organizing ISTE Approved 5 days STTP on **Developing and Managing IT Infrastructure with DevOps**

Dates : 09.12.2019 to 13.12.2019

Speakers:

1. Mr. Mahendra Mehra
2. Mr. Sandesh Patil

