



AMAZING 2021

Sand-Box Technologies feel so blessed to introduce our New Year edition of Sand-Box Newsletter BEACON | Vol 3.

May this New Year be full of happiness and positivity. We are so fortunate to have the confidence of so many students with us.

Kudos to all our team members for taking extra efforts to make each event of Sand-Box successful.

HAPPY NEW YEAR



"You have to dream before it comes true."

- Dr. A.P.J. Abdul Kalam





FROM THE CEO'S DESK

As you navigate our website and newsletter, I hope you learn more about the qualities that make our company an outstanding provider of essential educational services and a wonderful place to shine employability skills.

Amidst a pandemic, I'm very happy to see students demonstrating tremendous strength and Exorbitant passion towards career.

We provide service with a human touch.

We have earned the trust and respect of our customers for one simple reason—we have great people. They bring a strong service ethos to everything they do. We bring passion, pride and experience together.

We make a positive difference in people's lives.

At Sand-box, we have earned a reputation for helping students to transform the way in which they undergo skills training. The programs we come up with are needful to develop employability skills in entry level IT job seekers, as well as making skill training more efficient.

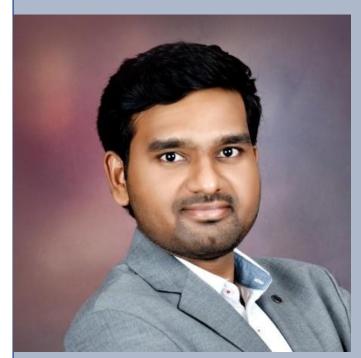
We have 'only hands-on' philosophy.

We have only one objective: to ensure our students objectives are achieved with the highest level of capability and assurance, and at the lowest possible cost.

We live out our values.

Sand-box's culture is defined by a simple set of values that define how we operate every single day – Trust, Care, Innovation, and Pride. They reflect how we interact with our students, our colleagues, and our business partners. We hold each other accountable for creating a company we can all be proud to work at.

I hope this provides you with a few reasons to get to know Sand-box better. Whether you are a student, job seeker, or a future employee, we look forward to finding out how we can work together to bring service to life.



Mr. JANI BASHA SHAIK



FROM THE CEO'S DESK (CONT.)

My team and I are thankful to you for having trust in the Sand-Box.

Your encouragement and the support, you express through your participation in our programs and through your kind feedbacks have been a great source of fuel for me and my team.

All these days my team has been exploring various knowledge transition models for you to learn much effectively.

In the year 2020, we have organized programs like employability factors to help students understand and what the industry expects from freshers? Interview ready program to help students get an awareness of real-time job interviews. The life cycle of the software training program end-to-end project training was based on the real-time project implementation program.

In this new year 2021, I wish to share the great news with all of you that we are rebranding as **Talent Reactor**. We are also coming up with new models of skill training. We're coming up with **Micro Internships** to help students build a Hands-On skill by taking up real-time development tasks. This program will provide a platform for students to express their ideas and come up with innovation.

With these words, I would like to wish you a **Happy New Year** and have a great year ahead.

CEO, SAND-BOX TECHNOLOGIES









WONDERFUL THINGS ARE A STEP AHEAD IN THIS NEW YEAR:)

Together with the nature, the seed of a helping plant named *SANDBOX

TECHNOLOGIES* has grown to be a very big tree with all your support!!!

Confused about your contribution?

Your registrations were a boosting sunlight that made us move along the direction of creating creative and blossoming ideas

Your participation was the water that flowed through out and enriched the activeness.

Your feedbacks were your thoughtful hands plucking out the leaves of dried methodologies succoring us to look more elegant than a Christmas tree.

Experiencing a roller coaster ride is a part of everyone's life and it was our's too but end of the day we really thank everyone of you for your wonderful support in the year of excitement and perplextion that is 2020.

From the roots to the top of this tree we would always be there to give you our shade of knowledge and lighten through this year too.

Wishing you a very happy new year and all the best for your great career.

DO MORE BE MORE!!!

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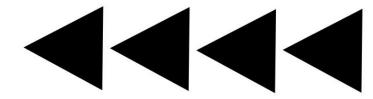
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A GLANCE OF 2020

AYEAR OF HIDDEN
OPPORTUNITIES GLUED WITH
THE FEAR OF FORBIDDEN
CIRCUMSTANCES



sand-bak

SANDBOX TECHNOLOGIES





JUDICIOUS JANUARY

SKILL MINISTRY SET TO OFFER NEW JOB ROLE: THE MULTITASKER

Having looked through lakhs of blue-collar job postings and job-seeker profiles over the last six months, the Ministry of Skill Development & Entrepreneurship (MSDE) has assessed that the 'multi-skilled', 'multi-tasker' is set to come in high demand across sectors, industry and even for domestic requirements.

A new job profile—probably the most sought after across sectors—has been discovered by the government for a formal debut: The 'multi-tasker'.

FLAT FEBRUARY

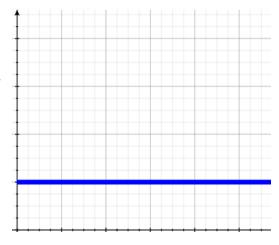
HIRING ACTIVITY REMAINS FLAT IN FEBRUARY 2020:

Hiring activity remained flat during February compared to the same month last year, mainly due to sluggishness in sectors like insurance, hospitality and travel, according to a report. The Naukri JobSpeak Index stood at 2,414 in February 2020, compared to 2,415 in the same month last year.

According to the report, the flat trend was primarily led by a led by a decline in growth rates across sectors such as insurance (-23 per cent),

hotel/ restaurants/airlines/travel (-18 per cent), auto /auto ancillary (-16 per cent) and recruitment/employment (-15 per cent) compared to February 2019.

Hiring activities for entry-level jobs (0-3 years) saw a positive growth, while mid-level executives, senior and leadership roles saw a decline in February 2020 versus last year.





MANDATORY MARCH



DEMAND FOR ESSENTIAL SKILLS

In this age of rapidly changing technology and skills requirements, soft skills are shifting from "nice-to-haves" to "essentials" — so much so that the nomenclature has followed suit. Many companies now refer to abilities like critical thinking, leadership, problem solving, communication and teamwork as essential skills, and they sometimes take precedence over hard skills that can be taught later. Driving this trend is an explosion of new technology that is

expected to permanently alter the workforce. Companies with teams full of critical thinkers who can adapt quickly will find themselves at the forefront of their industries, while those who are married to old methodologies will lag behind. These essential skills also set human workers apart from AI, making them a valuable asset to candidates entering the workforce. This March month has been a strive starting to dive deep into the skills search in the job seekers.



ACTIVATING APRIL

WEBSTORES NOW INTO THE LIMELIGHT

Ecommerce sales for fashion brands generally meant their business at Flipkart, Myntra and Amazon, but the pandemic has brought the webstores of brands like Puma.in, Levis.in and shop.adidas.co.in into the limelight.

As business grew 20% month-on-month on their mono-brand sites, fashion and lifestyle companies are upgrading and digitally promoting their websites, negotiating better deals with logistics partners.

Prior to the pandemic, volumes on the mono-brand web stores were low,

which made the companies unable to negotiate better rates from logistical partners, thus impacting their unit economics for online deliveries.



MERRY MAY

A NEW MODEL INTO THE MARKET!

Many companies expect to enroll, train and provide placement to over 10,000 people through the 'pay after placement' model for its software engineering courses.

They have launched an income share agreement-based 'pay after placement' model for all aspirants enrolling for its software engineering courses.

"This model will ensure that talent does not remain relegated to the background due to lack of financial resources."



JAUNTY JUNE



RESILIENT IT SECTOR GEARS UP FOR GROWTH OPPORTUNITIES, CHALLENGES AMID 'NEW NORMAL'

There were concerns that the pandemic might have an impact similar to the one seen during the 2008 financial crisis.

Covid-19 may have thrown curveballs this year but the \$191 billion-Indian IT sector has shown resilience and 2021 promises more growth opportunities as digital spends go up to tackle the challenges amid the 'new normal'.

IT firms like Infosys NSE -0.17 %, Wipro and Tech Mahindra booked chartered flights to bring home employees and their families, who were stranded overseas due to the pandemic and visa issues. And almost overnight, IT companies -- big and small -- embraced work from home.

"The month of June has been a month of a lot of change and uncertainty... (but) technology is no more being seen as just an enabler, it has become much more integral."



JOLLY JULY

50% of all new IT jobs coming up in Bengaluru, Pune and Hyderabad

Companies are looking to hire IT professionals who have a knowledge of SAP, Node.js and communication technology.

Project managers, software developers and testers, consultants and digital marketing leads are much in demand, with the IT sector itself is looking to hire a bulk of them—55%, 65%, 60%, 33% and 30%, respectively—across India.



"The IT sector remains one of the least affected across the globe since it's been playing a major role in digital transformation amid the pandemic with companies adopting technology and hybrid working models"

AGELESS AUGUST

SOME EMPLOYEES ARE GETTING A NEW JOB, AT THEIR OLD JOB



Rehiring has become a bit of a trend of late. "Across industries, 40% of our client base is considering or looking at rehiring laid off workers. This is happening the most in the financial services industry, then in manufacturing, followed by hospitality and healthcare,". For the most part, however these are not permanent positions. "The rehiring is usually for some project work, or as freelancers to add certain skills or improve sales productivity. Of the 40% looking to rehire, only 5-10% would be permanent positions,".

One big advantage of rehiring — those employees have already been part of the system and familiar with processes and culture.



SORROW SEPTEMBER

INTERNATIONAL OFFERS AT IITS HIT BY THE PANDEMIC BLUES

Seven top IITs — Bombay, Madras, Kharagpur, Guwahati, Kanpur, Roorkee and BHU — have together received 137 offers for international locations till now for the class of 2021, less than half of the 305 offers the previous batch had received, according to data culled from the institutes' placement cells.

International offers at Indian Institutes of Technology, which grew for the past three years, have hit a Covid-19 speedbump this year according to data culled from the institutes' placement cells.



OBSERVABLE OCTOBER

HYBRID MODEL WITH INCREASED EMOTIONAL SAFETY EMERGES AS THE PREFERRED NEW NORMAL BY WORKING PROFESSIONALS

Although the major portion are still unsure about starting traveling to office and have fear of contracting the virus, a significant percentage is looking forward to joining the office.

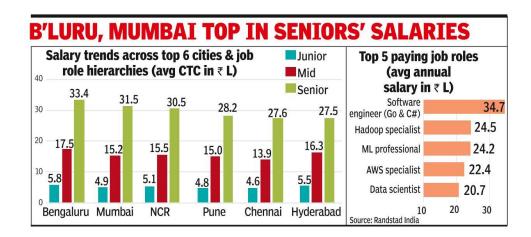
The hybrid model with increased emotional safety has emerged as the preferred new normal by working professionals, according to an YourDOST Survey on How



Indian employees feel about returning to office post Covid-19. The outcomes show a gradual inclination towards starting work from office or a Hybrid Model preference wherein working professionals want a Flexible-Work from Office policy.



NEW NOVEMBER



TECH KEEPS 'HOT JOB' TAG, LEADS IN PAYOUTS

Industry-wise, while IT takes the lead in junior-level pay scales, internet & e-commerce figures in the top 5 for junior-, mid- and senior-levels.

If you are proficient in programming languages like Golang and C# (C-Sharp) or specialize in Hadoop and machine learning, you will be among the top earners taking home Rs 24-35 lakh.

There has been a 25-30% average increase in salaries being paid between 2019 and 2020 for these profiles, which are used to build high-performance network services, cloud apps, and process big data. And these salary trends are expected to continue in the first quarter of 2021.

DAZZLING DECEMBER

IT SECTOR UNAFFECTED BY PANDEMIC

According to the report by job platform SCIKEY Market Network, demand for job roles in the IT sector continued to be unaffected despite the pandemic. The major job roles that were in demand during December were project manager, software developer, software tester, consultant and digital marketing lead, it added.

The sectors that are hiring developers the most after IT are internet and e-commerce (2.6 per cent), recruitment (2 per cent) and banking (1.5 per cent). In terms of salary, 50 per cent of the highest-paying IT jobs are in Bengaluru and Pune with a salary of more than Rs 25 lakh per annum, it added.



GATE 2021

Graduate Aptitude Test In Engineering



GATE Exam is the biggest national-level entrance examination that holds a lot of weightage when it comes to decide where you are going to do your higher studies and/or where you will subsequently do your PSU'S (Public Service job. Major Undertakings) take the GATE exam scores into account when employing new personnel into their company. So, a good GATE result means that you can easily get placements in any government job of your choosing or admissions in Top IIT / IISc Colleges.

This year GATE-2021 will be conducted by the IIT Bombay and the total number of subjects in GATE-2021 has increased to 27. Environmental Science and Engineering [ES], and Humanities and Social Sciences are the two new GATE papers added in GATE Exam 2021. The GATE exam 2021 will be a fully computer-based exam of 3 hours duration and will consist of 65 questions totaling up to 100 marks. Here are the updates of GATE-2021 and its examination dates mentioned below.

Eligibility Criteria:

- Students currently in pre-final year and final year of UG or already completed any degree in Engineering/ Technology/Architecture/Science/Co mmerce/Arts are eligible to apply for GATE-2021.
- No age limit for GATE-2021
- Backlog students also can apply for the GATE exam, but the candidate should be in the final year to apply for the GATE 2021 exam.

Questions category:

- Multiple Choice Questions (MCQ)
- Multiple Select Questions (MSQ)
- Numerical Answer Type Questions (NAT)

Scorecard Validity:

★ The validity of the GATE scorecard is 3 years from the date of announcement of the result.

Section No. of Marks Questions General Aptitude 10 15 **Engineering Mathematics** 55 13+72 And Subject Wise Questions Total 65 100

GATE 2021 Papers

1	Aerospace Engineering	AE
2	Agricultural Engineering	AG
3	Architecture and Planning	AR
4	Biomedical Engineering	BM
5	Biotechnology	BT
6	Civil Engineering	CE
7	Chemical Engineering	CH
8	Computer Science & Information Technology	CS
9	Chemistry	CY
10	Electronics and Communication Engineering	EC
11	Electrical Engineering	EE
12	Environmental Science and Engineering	ES
13	Ecology and Evolution	EY
14	Geology and Geophysics	GG
15	Instrumentation Engineering	IN
16	Mathematics	MA
17	Mechanical Engineering	ME
18	Mining Engineering	MN
19	Metallurgical Engineering	MT
20	Petroleum Engineering	PE
21	Physics	PH
22	Production and Industrial Engineering	PI
23	Statistics	ST
24	Textile Engineering and Fibre Science	TF
25	Engineering Sciences	XE*
26	Humanities and Social Sciences	XH**
27	Life Sciences	XL***



Exam Pattern:

GATE 2021 - Examination Schedule

Detailed Schedule of GATE 2021 Examination

Week & Day	Date (Day)	Time (IST)	Activities / Paper
Week 1 & Day 1	5 th February 2021 (Friday)	12:00 – 17:00 hrs	Miscellaneous Activities*
Week 1 & Day 2	6 th February 2021 (Saturday)	09:30 - 12:30 hrs (Forenoon Session - FN)	CE-1, IN, CY
	6 th February 2021 (Saturday)	15:00 – 18:00 hrs (Afternoon Session – AN)	CE-2, PH, AR, BM, AE, MN
Week 1	7 th February 2021 (Sunday)	09:30 - 12:30 hrs (Forenoon Session - FN)	EE, GG, AG, EY
& Day 3	7 th February 2021 (Sunday)	15:00 – 18:00 hrs (Afternoon Session – AN)	EC, PE, ES, ST, PI
Week 2 & Day 4	12 th February 2021 (Friday)	12:00 – 17:00 hrs	Miscellaneous Activities*
Week 2 & Day 5	13 th February 2021 (Saturday)	09:30 - 12:30 hrs (Forenoon Session - FN)	CS-1, MA, BT, CH, TF
	13 th February 2021 (Saturday)	15:00 – 18:00 hrs (Afternoon Session – AN)	CS-2, XE, XL
Week 2 & Day 6	14 th February 2021 (Sunday)	09:30 - 12:30 hrs (Forenoon Session - FN)	ME-1, XH
	14 th February 2021 (Sunday)	15:00 – 18:00 hrs (Afternoon Session – AN)	ME-2, MT

Mock Tests:

Mock tests play an important role in the last minute of preparation. In order to get more marks in GATE-2021 you need to attempt more mock tests before your actual exam. Here we gave a link of a free online mock test which is conducted by The Gate Academy.

- This mock test Only applicable for ME, ECE, EEE, CS, IN, CE streams.
- Mock test on 10th January 2021.

Registration

link:

http://thegateacademy.com/mmt

"A dream does not become reality through magic;

It takes sweat, determination, and hard work".

ALL THE BEST

TCS NATIONAL QUALIFIER TEST



TCS NQT is an exam organized by TCS to hire students for TCS and many other participating companies. It is a gateway for many job-seekers who wants to make their career in top MNCs.

From year 2020, NQT is conducted by TCS iON – a unit of TCS focused on providing digital learning platform for students. This platform provides different courses to meet industry demands.

This exam is conducted in online mode. NQT score is valid for two years for any corporation that considers NQT score. Candidates can apply for the assessment multiple times for improvement.

Eligibility Criteria

- UG, PG and Diploma pre-final year and final year students in any specialization
- Freshers with less than two years of experience

Companies that consider NQT score

- TATA CONSULTANCY SERVICES
- TATA ELECTRONICS
- TITAN
- EQUIFAX
- DATA PATTERNS
- UXD JOBS
- CROMA
- GODREJ etc.

TCS NQT STRUCTURE

NQT Structure

- No negative marking
- Rough paper and calculator are available on desktop screen during test.
- Duration 180 min

Mandatory paper

- 1. Verbal Ability
- 2. Reasoning Ability
- 3. Numerical Ability

Optional paper (mandatory for TCS & IT sector)

- 1. Programming Logic
- 2. Coding





Section	Total Question	Time
Verbal Ability	24	30 min
Reasoning Ability	30	50 min
Numerical Ability	26	40 min
Programming Logic	10	15 min
Coding 1(Hands-on)	1	15 min
Coding 2(Hands-on)	1	30 min

EMPLOYABILITY TESTS



Top leading sources for Employability

AMCAT or Elitmus or Cocubes: All the three assessments are considered as the topmost Employability tests for freshers. These tests are meant to check the employ-ability skills of the job seeker. This sets a benchmark for entry in the IT industry.

AMCAT i.e., Aspiring Minds Computer Adaptive Test allows you to apply for various companies via its scores. More than 300+ companies are partnered with it.

Detailed Eligibility Criteria for these 3 assessments: Students who have completed or in their final year Engineering (B.E/B.Tech). Students who have completed or in their final year of MBA Students who have completed their bachelor degree (BCA, B.Com, etc.) or in their final year.

AMCAT or Aspiring Minds Computer Adaptive Test evaluates candidates on the basis of their core skills which includes reasoning skills, quantitative aptitude, English and technical skills. Huge number of Companies use AMCAT platform for their Recruitment Drive and helps companies to easily find the candidates without going through the hectic process of recruitment.

Exam fees for AMCAT Assessment: Rs 990/-

Companies that hire through AMCAT Cognizant accenture Honeywell amdocs NTTData Mindtree Welcome to possible Microsoft ERICSSON





<u>CoCubes</u> Test commonly known as Pre-assessment Test. One of the best Platform for the graduate or undergraduate candidates for their placement More than 500+companies hire through on this page you will get all the updated information related to Preparation of CoCubes, syllabus, eligibility criteria, registration process, minimum cutoffs, etc. Cocubes is partnered with companies like Capgemini, DXC, Microsoft, Schneider Electric, John Deere, Barclays, HSBC.

Exam fees for CoCubes assessment: Rs 1200/-

Companies hiring through CoCubes:

If you want a job in the core sector. So, for non-CS/IT students it is a must then CoCubes is best out of AMCAT, eLitmus, TCS iON CCQT.



Exam Pattern For CoCubes								
s.no	Section	No. of Questions	Time Duration (minutes)					
1	Quant	15	15					
2	English	15	1 5					
3	Logical	15	15					
4	Computer Fundamentals	15	15					
5	Psycometric test	50	12					
6	Domain related round	20	20					
7	Coding round	3	45					
8	Written English Test	1	25					

		Exam Pattern For AMCAT								
Section	No. of Question s	Time Duration (minutes)								
Quantitative Ability	16	18								
English Ability	18	16								
Logical Reasoning	14	16								
Amcat Personality Inventory	90	20								
Domain Specific test	Based on module	Based on module								
	Ability English Ability Logical Reasoning Amcat Personality Inventory Domain	Quantitative Ability 16 Ability 18 Ability 18 Ability 14 Logical Reasoning 90 Personality Inventory Domain Based on								

<u>eLitmus</u> is commonly known as pH (Potential Hiring) test, Best Platform for the graduate or undergraduate freshers for their placement.

More than 50,000 freshers get placed via eLitmus test. eLitmus changes their Syllabus every 2 to 3 months. A few new topics were recently included in the eLitmus exam pattern for 2020.

Almost every 14 days eLitmus Hiring Potential Test (pH Test) happens all across the country on various test centers. The eLitmus exam is one of the most difficult exams generally.

Exam fees for eLitmus Assessment: Rs 850+GST

Companies hiring through eLitmus:



INTERNSHIP AND WORK

EXPERIENCE

Life is a continuous chain of experiences. To gain Communication skills, team work, problem solving, motivation and time management; these are all soft skills which are essential to have in the workplace and are highly valued by employers. You'll get a chance to develop these skills and more during your work experience placement.

To gain a better understanding of a career, organize some work experience or a few days' work shadowing (Internship) with an employer. Finding a job can be a challenge, especially if you don't have experience. Unfortunately, you need to obtain a job before you can gain experience. Internships are a great way for college students, recent graduates or anyone considering a career change to obtain valuable work experience.



Internship is a duration of professional learning experience for a period of time. But the question is why do we need to do an internship? Internships are the best way to learn and work in a real working environment in a particular organization. This is the one of the best learning phases of student life in which they learn the most of the practical aspects of their career.

Internships have their own importance not only for people belonging to IT stream but all of them who want to make their career bloom.

Does internship matter to get a job of your choice?

Actually, Internship is just a preferable way for hands-on-training and getting an exposure but doesn't define the factor of getting a job of your choice in the future. Rather, it only helps you to explore yourself, the work environment and your comfort zone while working. Undoubtedly, it increases the opportunity for you to get a job.

Students may get to have a summer internship which they can opt for in their summer vacation to make the best use of their time or they can have proper hiring for an internship by a particular company during their course of time.

Internship lifts your potential

Having an Internship/Work experience in your resume builds a great impression of yours in front of the responsible person of the organization.

Internship Offers:

Here few companies' internship notifications are listed

1. IBM Off Campus fresher's recruitment 2021

❖ Role : Research Intern Position❖ Eligibility : BE/B -Tech &ME/M-Tech

Preferred Degree : Computer Science

Registration link : Apply here

Electronic Circuit Design Internship

Company : Mechanical Chef

❖ Role : Electronic Circuit Design Intern❖ Eligibility : EC Engineering (Any Batch)

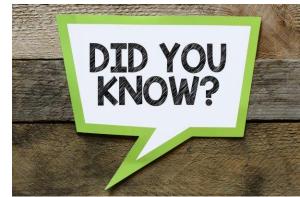
❖ Registration link : Apply here

The Origin of Gmail



Google encouraged its employees to devote 20% of their side projects. this is called like a fruit of google 20% time.it is a allowing its engineers to do their personal projects during working hours.





created by **Paul Buchheit.** Paul Buchheit started working on develop a web-based mail from 2001 only. He worked a lot and finally **Gmail launched on April 1,2004.**

That was April's Fool day, and people thought it was prank. but after some time, people realized it was real, and it became one of a number of free email services. On April 1, 2004, Gmail was launched with one Gigabyte (1GB) of storage space.

Now Users can buy additional storage, shared among Gmail, Google Drive and photos through a monthly subscription plan from Google One. As of 2018, storage of up to 15 gigabytes is included, and paid plans are available for up to 30 terabytes for personal use.

Gmail was ranked second in PC WORLD'S "100 Best Products of 2005", behind Firefox. Forbes declared Gmail to be the best webmail application for small businesses.



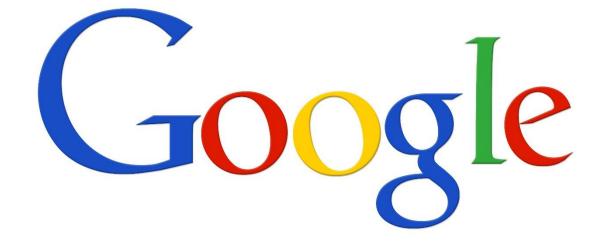
Gmail offered robust email search alongside one gigabyte of storage. many additional features introduced through the years, thus helping it become a leading service.

Some features are:

- In August 2011, Google introduced Gmail Offline with and powered app for providing access to the service while offline. Gmail Offline runs on the browser
- In October 2014, Google introduced Inbox by Gmail on an invitation-only basis. Developed by the Gmail team, but serving as a "completely different type of inbox", the service is made to help users deal with the challenges of an active email
- At the end of May 2017, Google announced that it had applied ML technology to identify emails with phishing and spam, having a 99.9% detection accuracy. The company also announced that Gmail would selectively delay some messages, approximately 0.05% of all, to perform more detailed analysis and aggregate details to improve its algorithms.

Once upon a time the people thought it's a small experiment and said to Mr Paul Buchheit that it is a worst idea; By telling "it's Won't work!" but today *Gmail* the most popular and an important part of Google's Suite (Google Work space) and Gmail dominates consumer mail with more than 1.5 billion globally active users.

"You don't have to see the whole Staircase, just take the first step"





Andhra Pradesh State Skill Development Corporation(APSSDC)

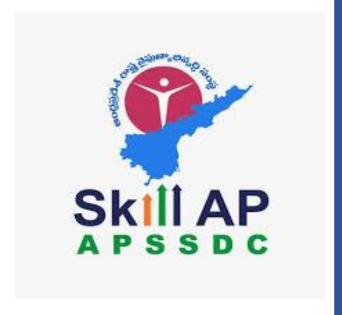
(Department of Skill Development & Training, Govt. of Andhra Pradesh)



OVERVIEW:

APSSDC is a unique organization formed as a Public Private Partnership (PPP) corporation to promote skill development & entrepreneurship in the state of Andhra Pradesh.

The Government of Andhra Pradesh has the vision (Swarna Andhra Vision 2029) to make Andhra Pradesh among the three best states in India by 2022 when India celebrates its 75th



Recent Training conducted by SAND-BOX TECHNOLOGY Collaboration with APSSDC:

Sand-Box Technologies is an Ed-tech start-up in Bengaluru.

The mission of Sand-Box is to bridge the skill gap between student and industry. The goal of Sand-Box is to work as a light house for career development of students and job seekers and make them job ready. The vision of Sand-Box is to disrupt traditional skill training models as they hardly provide any hands-on exposure to industrial knowledge for job seekers as a result of which close to 80% of entry level engineers are either Unemployable or facing difficulty in finding jobs.

Hence to overcome such issues of students, **Sand-Box joined hand with APSSDC** and conducted some of the training program and is also looking forward to conduct more in future.

Sand-box website: https://www.sand-boxtech.com/

→ THE LIFE CYCLE OF A SOFTWARE – BUILDING AN END-TO-END PROJECT – in collaboration with APSSDC



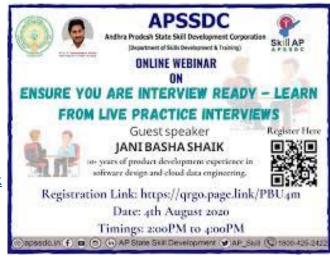
- Interested candidates can visit the <u>website link</u>.
- Link for playlist of session recordings YouTube link

Some of the Webinars organized in collaboration with:

- → Online Webinar on "The employability factors – The skills IT employers are looking in entry level engineers".
 - Link for recorded session YouTube link



- Online Webinar on "The employability factors – The skills IT employers are looking in entry level engineers".
 - Link for recorded session <u>YouTube link</u>



Other Training Program and Webinar conducted by APSSDC

 Data Science and AI using Python in Collaboration with Naresh Technologies.

Link for playlist of session recordings – YouTube link

Online Training Program on Augmented Reality by vuforia unity3D.

Link for playlist of session recordings – YouTube link

• Online Webinar in Career in DevOps.

Link for playlist of session recordings - YouTube link

 Online Training program on GAMIFICATION WITH AR & VR WORKSHOP.

Link for playlist of session recordings – YouTube link

 3 Days Workshop on RPA Industrial Implementation and Its Career Opportunities.

Link for playlist of session recordings – YouTube link

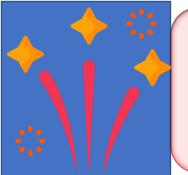
• Online Training Program on Web designing for beginners.

Link for playlist of session recordings – YouTube link

Upcoming Training Program and Webinar conducted by APSSDC

- Training Program on "Artificial Intelligence.
 Registration link <u>Click here to apply</u>
- Training on WIPRO ELITE NTH 2021.
 Registration link <u>Click here to apply</u>
- Microsoft Imagine Cup Global Competition-2021*
 Interested and registered candidate can visit website website link





AS PROMISED BY US,

RESULT IS HERE

SAND-BOX CHRISTMAS EVENT





KEEP GROWING



CREATED BY

- SHRISHTI SHIVA



Now it's play time!!!

- E E H Ι B В Α T Υ H A P N E W E A R P γ D V Y Ι Н E T Т L W N 0 0 R R A E A N M H E E D Ι В В В 0 E C Υ Ε S F J N G L A R 0 0 J M H E Α Α K P Н D R A 0 A C Ι T Y H N M ٧ H C E N N U K K R N B P 0 Ι В A 0 D 0 Ι N A H V R N 0 A D 0 A D T I 0 Ι E Y H M D H A E R N γ H В M F U K Ι N M U A L Е Ι Υ I I T S A A R В N W В ٧ U G S W M Ι S H A E A S K E E Ι W Ι C R
- 1. What is the last day in 2021 calendar?
- 2. Who won the spirit of cricket of the decade award?
- 3. What gets wet while drying?
- **4.** president of America?
- 5. Half byte is also called as ___.
- 6. National mathematics day celebrated every year in __ month?
- 7. This is a type of small fruit Which is smaller than your hand Fuzzy outside, green inside Often comes from New Zealand. Find my name??
- 8. Name of the newsletter which you're reading now?
- 9. Where did the first case of the coronavirus disease originate?
- 10. Antonym of sad doing synonym of creative work in 12 months of his calendar time?



FASCINATING FACTS



20% of Earth's oxygen is produced by Amazon rainforest



In an entire lifetime, the average person walks the equivalent of five times around the world







Stomach acid is strong enough to dissolve stainless steel



It takes 8 minutes, 19 seconds for light to travel from the Sun to the Earth



no matter what angle you look at him, Mickey Mouse's ears are always circles



Prairie dogs say hello with kisses

MILESTONES OF SAND-BOX IN 2020

(CLICK ON IMAGES TO VIEW CONTENT)





MICRO-INTERNSHIP PROGRAMME

Coming up with an exciting opportunity for the year 2021 to help students build hands-on skills by taking up real-world progressive tasks



OWN THE STAGE AND OPEN WITH MIC

To give an opportunity to students to express their opinions and share their knowledge with other students



BEACON NEWSLETTER

To distribute the knowledge across all students



WITNESS BLOCK CHAIN IN ACTION

To help students connect with industry professionals



More than 60% of driving force for SANDBOX are women



INTERNSHIPS

30 + internships created while establishing sandbox Lighthouse team



SECURED JOBS

Four of the Light House team members successfully secured job within various MNCs



FEEDBACKS

Received around 96% positive feedback from over 1000 students for SOFTWARE LIFE CYCLE program



SAND-BOX BEGIN FROM BASICS

To bridge the gap between IT and NON-IT students and brush up the basics



ONLINE TRAINING ON THE LIFE CYCLE OF A SOFTWARE - BUILDING AN END TO END PROJECT

To provide a hands-on experience in building an end to end project and give an idea regarding various industry oriented technologies



EMPLOYABILITY FACTORS - SKILLS TO GET READY FOR INDUSTRY

To give a glimpse about the skills IT employers are looking in entry-level engineers



FEDEX DAY - THE STORY & SCIENCE OF DATA

To let students know how much can be achieved in a spawn of 24 hours



SAND-BOX EXAM BUDDY SERIES

To help students with academics and enable student to student knowledge sharing



INTERVIEW TRAINING FROM LIVE TRAINING EXPOSURE

To help students understand the process of interview and various factors that help them to crack the interview

Encouragement

Students

Hardwork

Support

Determination

Innovation

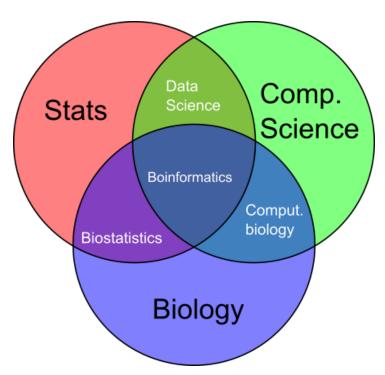
Creativity

Teamwork

BIOINFORMATICS

STEP TO COMBINE REALMS OF MATHEMATICS AND BIOLOGICAL SCIENCE

Bioinformatics is a most advance and emerging sector of today.



It is an interdisciplinary field that develops methods and software tools for understanding and interpreting biological data.

It is a combination of Information Technology and Biology and is implemented using computer science, statistics, data science and biology.

This field undoubtedly introduces a broad aspect of engineering in medical field.

It involves three components:

- a) Database to store and manage big data.
- b) Development of algorithms and statistics for the interpretation and understanding of data.
- c) The software tools developed are used to analyse DNA, RNA, proteins sequences, gene expression, protein structure and biological mechanism.

It requires advance knowledge of computer mathematics and statistical methods for understanding of biological phenomena at molecular level.

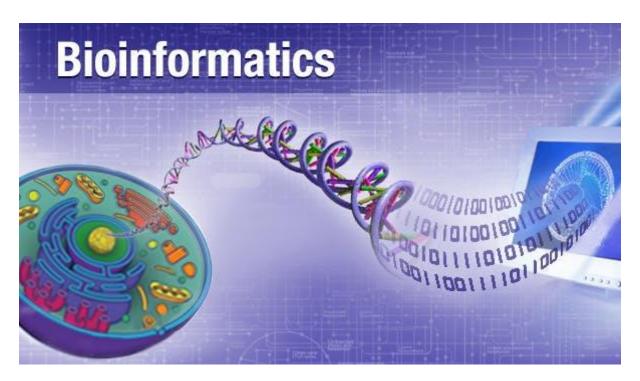
Historical Background

It started in Switzerland in the early 1980s. Swiss Bioinformaticians created software for the comparison of DNA sequences, developed programs for the analysis of experimental protein data, invented tools for modelling the three-dimensional structures of proteins, and built databases containing key information about protein sequences.

Computing Languages

For various applications of Bioinformatics, various computer programming languages are used. R – a statistical programming language is becoming the most widely used software tool for Bioinformatics.

Other languages which are used is C, C++, Java (compiled languages) and also, scripting languages like Perl and Python.



Some Sectors of Application

- Molecular medicine
- Personalized medicine
- Preventive medicine
- Gene therapy
- Drug development
- Climate change activities
- Biotechnology
- Forensic analysis
- Bio-weapon creation
- Crop improvement

Courses Offered in India

- Advanced Diploma in Bioinformatics
- B.Sc in Bioinformatics
- B.Tech in Bioinformatics
- B.Sc(Hons.) in Bioinformatics
- BE in Bioinformatics
- M.Sc in Bioinformatics
- M.Tech in Bioinformatics
- PG Diploma in Bioinformatics
- M.Sc (Hons.) in Bioinformatics
- MS in Bioinformatics
- ME in Bioinformatics
- Ph.D in Bioinformatics

Job Profiles

- Professor
- Science Technician
- Computational Biologist
- Research Scientist
- Bioinformatics Software Developer
- Database Programmer
- Pharmacogenomics



VIRTUAL REALITY

Morton Heilig(invented VR Technology in 1957)

Virtual reality (VR) refers to a computer-generated simulation in which a person can interact within an artificial three-dimensional environment which may be realistic or imaginary, macroscopic or microscopic and based on realistic physical laws of dynamics or on imaginary dynamics using electronic devices.

In VR there are many types of VR implementations and below we have listed 4 common setups:

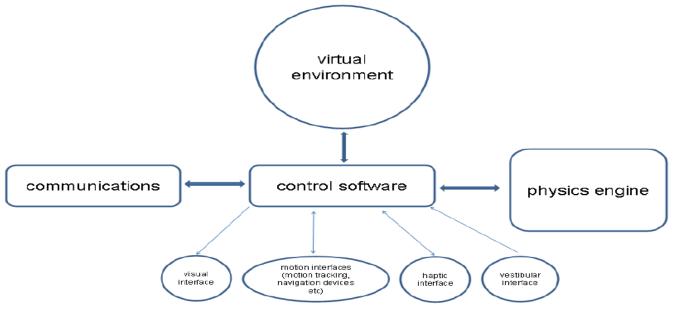
- 1. Desktop VR (Monoscopic or Stereoscopic)
- 2. Immersive VR (HMD, CAVE, wide screen)
- 3. Collaborative Systems
- 4. Mixed or Augmented Reality



How VR work?

The technology behind virtual reality and the basic terminology surrounding the development of a simulated ecosystem for a head-mounted display (VR headset).

The primary subject of virtual reality is simulating the vision. Every headset aims to perfect their approach to creating an immersive 3D environment. Each VR headset puts up a screen (or two – one for each eye) in front of eyes thus, eliminating any interaction with the real world. Two autofocus lenses are generally placed between the screen and the eyes that adjust based on individual eye movement and positioning.



A schematic view of a VR system.

APPLICATIONS OF VR IN EDUCATION:

The multi-sensory, interactive, nature of VR has made it a popular with many researchers in education, rehabilitation and in cognitive neuroscience. This is because the virtual environment is more 'controllable' than the real world. Virtual reality can be used to enhance student learning and engagement. VR education can transform the way educational content is delivered; it works on the premise of creating a virtual world and allows users not only see it but also interact with it. Now according to educational application areas of VR may be categorized into 3 different types:

- 1. Application in schools and colleges to enhance core curriculum subjects.
- 2. Applications for museums, 'edutainment' and demonstrations.
- 3. Utilization for training (children or adults).

PROJECT WORK

ELECTROOCULOGRAM (EOG) - BASED PERSONAL ASSISTIVE SYSTEM

INTRODUCING:

The project presents an EOG-based personal assistive system for amyotrophic lateral sclerosis patients that allow users to spell asynchronously by only blinking. Twenty-six buttons corresponding to 26 alphabets displayed to the user via MATLAB code are intensified in a random order. To get the signal, the user must blink his/her eyes in synchrony as the target signal reached.

OBJECTIVE

EOG-based that allows user to spell asynchronously by only blinking. Twenty-six buttons corresponding to 26 alphabets displayed to the user. To select a button the user must blink his/her eyes in synchrony and the 2 data processing procedures are used to detect frequency Specially support vector machine(SVM) classification and wave form detection are combined to detect eye blinks. Decisions are Made based on the result of SVM classification and wave form detection.

PROBLEM IDENTIFICATION

- The key issue of electroencephalography (EEG) is, most existing methods rely on a threshold. However, it is often time consuming to select a satisfactory threshold, and the chosen threshold might be inappropriate over a long period of time due to the variability of the EEG signals.
- Usage of electrodes are more in EEG; one electrode failure leads to fault in working of system and gives a false output and also may leads to system damage.

PROPOSED SYSTEM

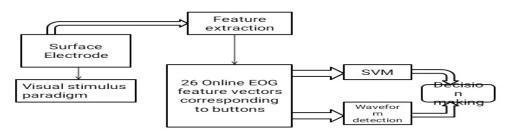
 This project proposes an EOG-based personal assistive system for amyotrophic lateral sclerosis patients. Twenty-six buttons corresponding to English letters were displayed via MATLAB code, and the buttons are intensified in a random order.

- Two data processing procedures, specifically support vector machine (SVM) classification and waveform detection, are combined to detect eye blinks.
- During detection, we simultaneously feed the feature vectors extracted from the ongoing EOG signal into the SVM classification and waveform detection modules. Decisions are made based on the results of SVM classification and waveform detection.

BLOCK DIAGRAM

Block Diagram

To detect the signal



TOOLS USED

Software required :-

MatlabR2015b

Hardware Required:-

Surface electrode, Power Supply, Transformer, USB.

SOFTWARE RESULTS FOR OUTPUT

Step-1:- Record the signal

Step-2:-Letter Display

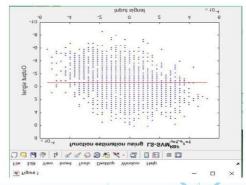
Step-3:- Signal for alphabet

Step-4:- Signal analysis

Step-5:-Diagnosis of signal

Step-6:-Working model for svm

SVM classification for both signals



CONCLUSION

The proposed approach produces commands depending on the user's eye blinks that are performed in synchrony with button. Using this approach, the number of possible commands is markedly increased. Because only one channel is used, the system has a high degree of usability and is more user friendly.

FUTURE WORK

In the future, we will expand the applications of the proposed EOG- based HCI to end-users, such as severely paralyzed patients to spell about their personal needs.

IDEA HUNT - JAM 8 Minute Talk is the upcoming event at Sand-Box and a very good chance to express yourself through your Ideas and presentation.

IDEA HUNT BROCHURE

REGISTER HERE

EVENT AT SAND-BOX



Sand-box is renamed as

Talent Reactor







LOGO AND TAGLINE CONTEST

WELCOMING STUDENTS TO

- 1) CREATE LOGO FOR TITLE 'TALENT REACTOR'
- 2) COME UP WITH A CREATIVE TAGLINE FOR LOGO

REGISTER AT:

https://shrl.ink/7p5v



Rules:

- 1) Logo should not have any sharp edges
- 2) Not more than 3 colour to be used in logo
- 3) Tag line to indicate meaning as 'one stop for students to upskill and become employable' or a place where a
- student can put theory into action or a happy workplace where right minds can collaborate and create innovative

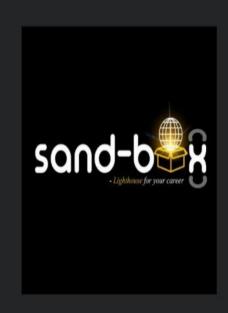
SAND-BOX IS RE-BRANDING AS

TALENT REACTOR

CLICK HERE TO SUBMIT THE LOGO AND TAGLINE



CALENDAR 2021



JO	IN	US.	ΑT	١.	
TEL	EG	RAM	CH	IAN	INI

TELEGRAM GROUP

LINKEDIN

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	3	10	17	24	31	W	Т	F	s	s	M	Т	
	4	11	18	25		Т	F	s	s	M	Т	W	
	5	12	19	26		F	s	s	M	т	W	Т	
	6	13	20	27		s	s	M	Т	W	т	F	
	7	14	21	28		s	M	Т	W	Т	F	s	

EMBRACE A NEW START FULL OF

HOPE



