



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
RAJKUMAR GOEL INSTITUTE OF TECHNOLOGY
5 KM STONE, DELHI MEERUT ROAD, GHAZIABAD



BYTES
NOT JUST ONES
AND ZEROS

BYTES

VOLUME:10 ISSUE:4

MARCH - APRIL

2021-2022



MISSION

To provide quality education in both theoretical and applied foundations of Computer Science and train students to effectively apply this education to solve real world problems.

To amplify their potential for lifelong high-quality careers and give them a competitive advantage in the challenging global work environment

VISION

To be recognised globally for delivering high quality education in the ever changing field of Computer Science and Engineering, both of value & relevance to the communities we serve.

FOR ANY DETAILS OR QUERY CONTACT:

Bytescse@rkgit.edu.in

**FACULTY
EDITORS**

**Ms. Nidhi Gupta
(Coordinator)**

<Members/>

**Mr. Akash Luthra
Ms. Anjali Yadav
Ms. Sonam**

**STUDENT
MENTORS**

Aditi Singh

4th year

Ashi Gupta

4th year

Neetika Tripathi

4th year

Prakharima Singh

4th year

Satyarth Singh

4th year

Saumya Gupta

4th year

Shambhavi Gupta

4th year

STUDENT COORDINATORS

Aditi Dhal
3rd year
Arushi Srivastava
3rd year
Deep Kushwaha
3rd year
Divyansh Yadav
3rd year
Lavish Sadh
3rd year
Nidhi Tiwari
3rd year
Nitigya Tiwari
3rd year
Pranjal Srivastava
3rd year
Tanya Dwivedi
3rd year
Teena Singh
3rd year
Uddhav Sankhdhar
3rd year

STUDENT EDITORIAL BOARD

Aditya Pratap Singh
2nd year
Almaaz Ahmed
2nd year
Ayush Sharma
2nd year
Gavishi Raj
2nd year
Kulsum Sheikh
2nd year
Mohd. Hashir
2nd year
Raj Maurya
2nd year
Reeshika Gupta
2nd year
Shanvi Pachauri
2nd year
Shivanshu Mishra
2nd year
Shubham Kumar
2nd year
Yadvendra Rathor
2nd year

Contents

01 Eminent Personality

Tech Bytes

02

03 Tech News

Events

04

05 Upcoming Events

Achievements

06

07 Faculty Corner

Student's Corner

08

09 Are You Missing
What's New ?

Internships

10

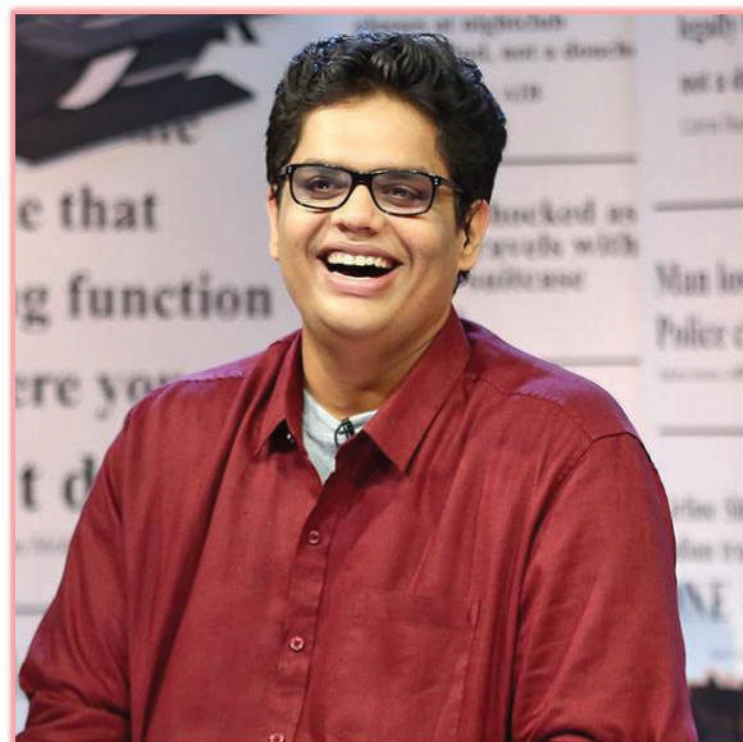
11 Fun Section

EMINENT PERSONALITY



"The answers to your questions lie within-you just have to be courageous enough to do, what it takes to live your dreams"

Tanmay Bhat



Tanmay Bhat is an Indian YouTuber, stand-up comedian, scriptwriter, producer and co-founder of the agency AIB, he is the jack of all trades. Nowadays he is known for his self-titled Youtube channel, Tanmay Bhat. On his channel, he uploads reaction videos, vlogs, and do gaming live streams. And owing

to such diverse content, he has gained immense popularity and has more than 4 million subscribers on his YouTube channel, with around 6 millions followers on social media.

Tanmay Bhat was born and brought up in Mumbai. Tanmay was initially pursuing marine biology but destiny seemed to have other plans for him. He started doing a lot of open mics and stand-up comedy shows from 2009. His quirky punch-lines garnered him accolades from the audience. He was also one of the first four comedians to be featured at the Comedy Store Mumbai's first all-Indian comedian line up, titled Local and In 2018, he was a judge in Comicstaan, a stand-up comedy competition broadcast on TV.

However, in the next season of the show he was replaced due to the controversy related to AIB.

Tanmay Bhat had his writing debut with UTV Bindass' flagship show, Hass Ley India. From there, he went on to write for MTV shows. He ventured into story screenplay and dialogue writing for Disney India's daily comedies and NDTV show with Farhan Akhtar. He recently received a lot of recognition as a writer for his exceptionally executed nostalgia-evoking CRED's advertisements that are known for putting a spin on the ordinary. Bhat has also scripted TV award shows including the Filmfare Awards, Star Parivaar Awards, Balaji Awards, Big TV Awards and Stardust Awards.

It's not often that comedians step out of their well-established niche and dive into something diametrically opposite. Bhat has done just that. In his second YouTube channel- Honestly by Tanmay Bhat, he talks about issues like depression, money-handling, heartbreak, ambition and various other youth-related topics. Many YouTubers do have similar subjects, but to dish it out with humour makes it easier to consume, a task which Tanmay manages beautifully.

But Tanmay's journey has not been as much of a cake walk as it seems. He has been a part of numerous controversies due to which he was criticised vehemently by a large population of

people and is more often in news for the wrong things given his unapologetic humor that leaves nobody out.

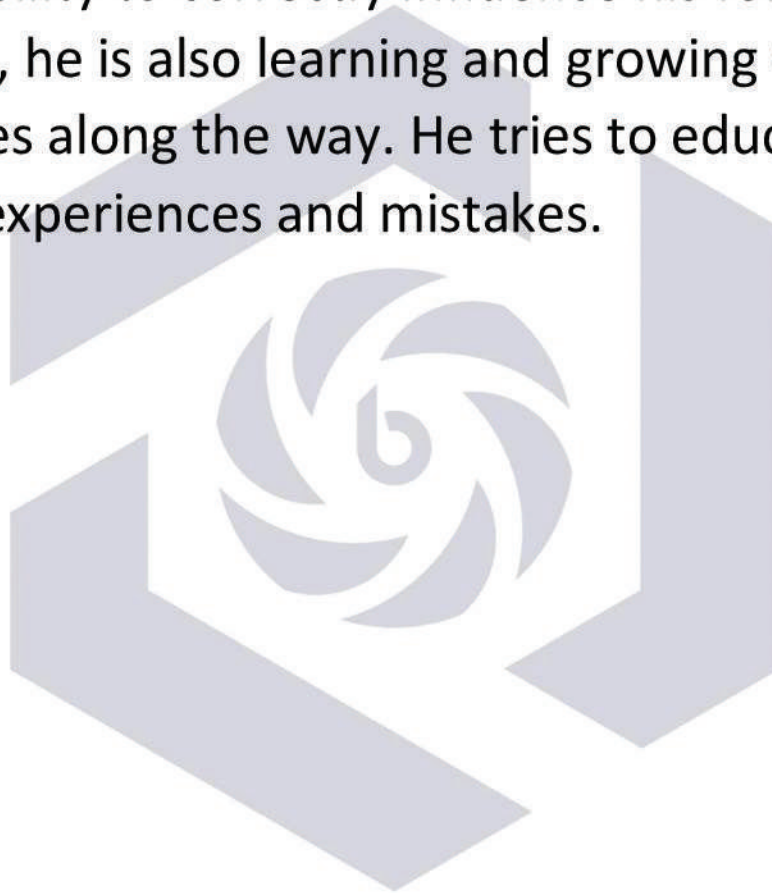
Tanmay has been subjected to body shaming many times but he has always thanked people for calling him fat because if they hadn't then he wouldn't have strived and worked harder for becoming what he has become.

“When people troll me for being fat on twitter I actually reply saying, ‘thank you’ because if I wasn't fat I would have never worked this hard. I say thank you because I have an entire career because of it. I say thank you, because if it wasn't for those jokes, I wouldn't have had that much anger in me to go out there and kill it.” Said Tanmay in one of the Interviews.



Even after all the backlash and downfall, he still retains his humour and the courage to speak his mind.

In a world where social media has a lot of power, Tanmay Bhat is one such comedian who knows, that as a content creator, it is his responsibility to correctly influence his followers. But on the other hand, he is also learning and growing with his fans, making mistakes along the way. He tries to educate his fans from his prior experiences and mistakes.



TECH BYTES

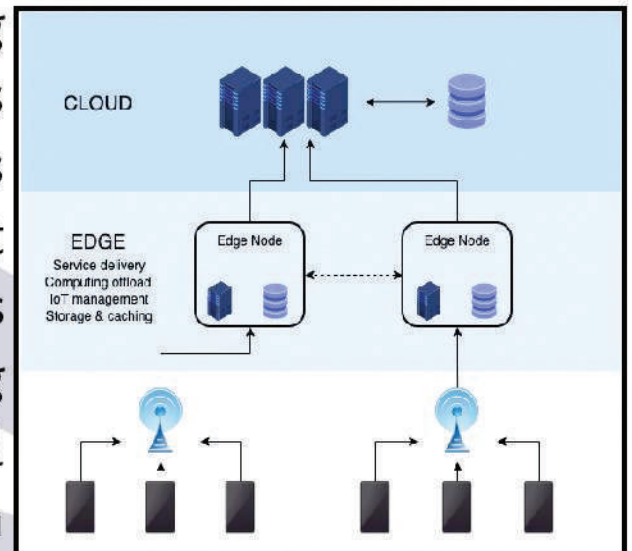


"The best way to predict the future... is to invent it"

Edge Computing

What is Edge Computing?

Edge Computing is an emerging computing paradigm which refers to a range of networks and devices at or near the user. Edge is about processing data closer to where it's being generated, enabling processing at greater speeds and volumes, leading to greater action led results in real time. It offers some unique advantages over traditional models, where computing power is centralized at an on-premise data center.



Why is Edge Computing important?

Much of today's computing already happens at the edge in places like hospitals, factories and retail locations, processing the most sensitive data and powering critical systems that must function reliably and safely. These places require solutions with low latency that do not need a network connection. What makes edge so exciting is the potential it has for transforming business across every industry and function, from customer engagement and marketing to production and back-office operations. In all cases,

edge helps make business functions proactive and adaptive—often in real-time—leading to new, optimized experiences for people.

Edge Computing benefits and applications:

Rapid response: Data transmission takes time. In some use cases—like self-driving cars or telesurgery—there isn't time available to wait for data to make a round trip to the cloud and back. Edge makes sense for these cases where there are requirements for real-time or extremely rapid results.

Privacy: Users may prefer (or be required) to keep control of sensitive data locally without sending it to the cloud.

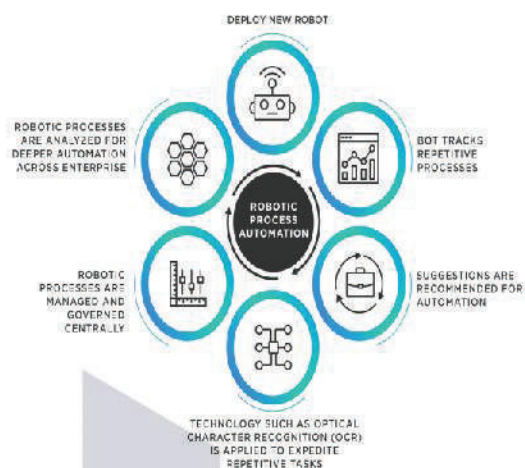
Cost sensitivity: Processing data in different parts of the cloud continuum involves different cost profiles, which can be optimized to minimize total cost across the system as a whole.

Optimized close to consumption: Digital production and consumption is optimized for the best experience and lowest cost, making edge work for content delivery, for example, or on an offshore oil well.

Robotic Process Automation

What is Robotic Process Automation?

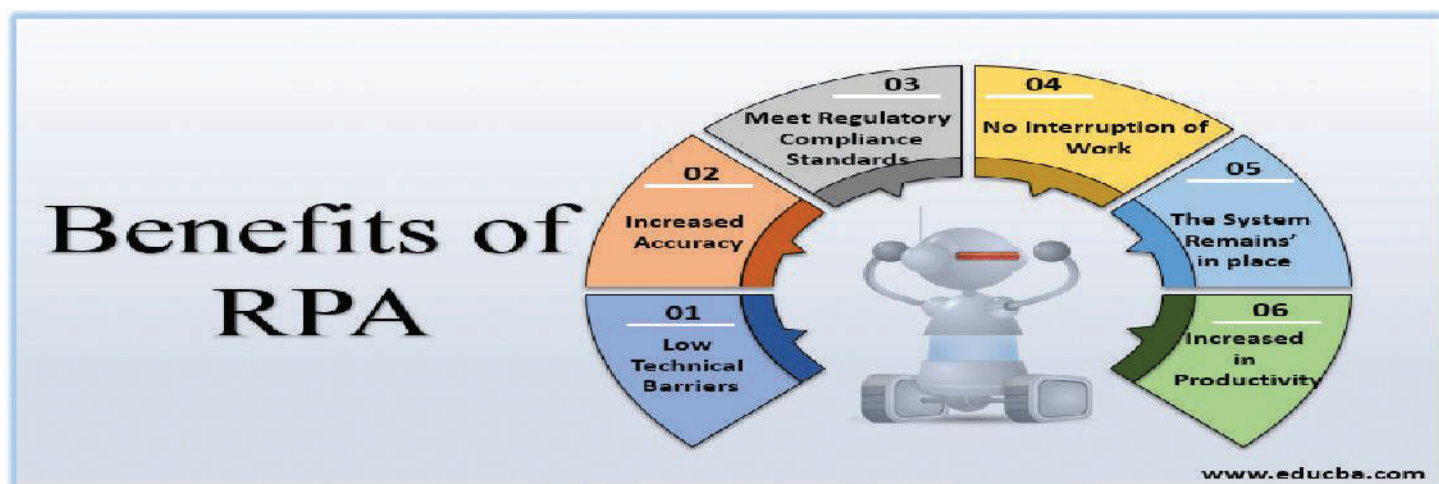
Robotic process automation (RPA) is a software technology that makes it easy to build, deploy, and manage software robots that emulate humans actions interacting with digital systems and software. Just like people, software robots can do things like understand what's on a screen, complete the right keystrokes, navigate systems, identify and extract data, and perform a wide range of defined actions. But software robots can do it faster and more consistently than people, without the need to get up and stretch or take a coffee break.



Where can RPA be used?

Today, RPA is driving new efficiencies and freeing people from repetitive tedium across a broad swath of industries and processes. Enterprises in industries ranging from financial services to healthcare to manufacturing to the public sector to retail and far beyond have implemented RPA in areas as diverse as finance, compliance, legal, customer service, operations, and IT. And that's just for starters. RPA has become so widespread

because it is broadly applicable. Virtually any high-volume, business-rules-driven, repeatable process is a great candidate for automation—and increasingly so are cognitive processes that require higher-order AI skills.



What features and capabilities are important in RPA technology?

To build and manage an enterprise-wide RPA program, you need technology that can go far beyond simply helping you automate a single process. You require a platform that can help you create and manage a new enterprise-wide capability and help you become a fully automated enterprise. Your RPA technology must support you end-to-end, from discovering great automation opportunities everywhere, to quickly building high-performing robots, to managing thousands of automated workflows.

TECH NEWS



“Our Future success is directly proportional to our ability to understand, adopt and integrate new technology into our work”

OnePlus 10T might feature 16 GB RAM

According to a latest leak, the upcoming OnePlus smartphone is tipped to pack up to 16GB of RAM and up to 512GB internal storage.



Google Pixel Buds Pro to launch on July 28

The Pixel Buds Pro are the first pair of true wireless earbuds from Google that come with active noise cancellation functionality. The ANC technology of Google is built around a custom 6-core audio chip.



Asus two new smartphone launched

According to Gadgets Now, The ROG Phone 6 is priced in India at Rs 71,999 for the lone 12GB+256GB storage configuration. Meanwhile, the single 18GB+512GB storage variant of the ROG Phone 6 Pro comes at Rs 89,999.



Surface Laptop Go 2 launched

The Surface Laptop Go 2 is a successor to the two-year-old Surface Laptop Go. The new Surface Laptop Go from Microsoft comes with an 11th gen Intel Core i5 processor, up to 16GB LPDDR4X RAM and up to 256GB of SSD storage. It comes at a starting price of Rs 73,999 in India.



Canon launches two new lenses

Canon has expanded its RF lens lineup with the launch of two new lenses in India. The company has launched the RF24mm F1.8 Macro IS STM and RF15-30mm F4.5-6.3 IS STM lenses designed for the EOS R range of mirrorless cameras.



EVENTS



**"All events are just like show that has an end.
Nothing remains forever,except the memories,
bitter or sweet, or both"**

Seminar on “IOT”



Under the aegis of the Computer Science & Engineering department, a seminar on the “**Internet of Things**” was organized on the 9th of March 2022. Students from all the branches were allowed to attend the seminar.

IOT is a Network of Things/Physical Objects/Entities, which are enabled with electronics, software, sensors and network connectivity and exchange data over the Internet.

In the seminar, the students got to know about the advantages of IoT and their extent in the IT fields.

The session was successfully conducted. More than 100 students attended the session and a few dedicated faculty members also shared a great part.



Technical Paper Presentation & Book Launch



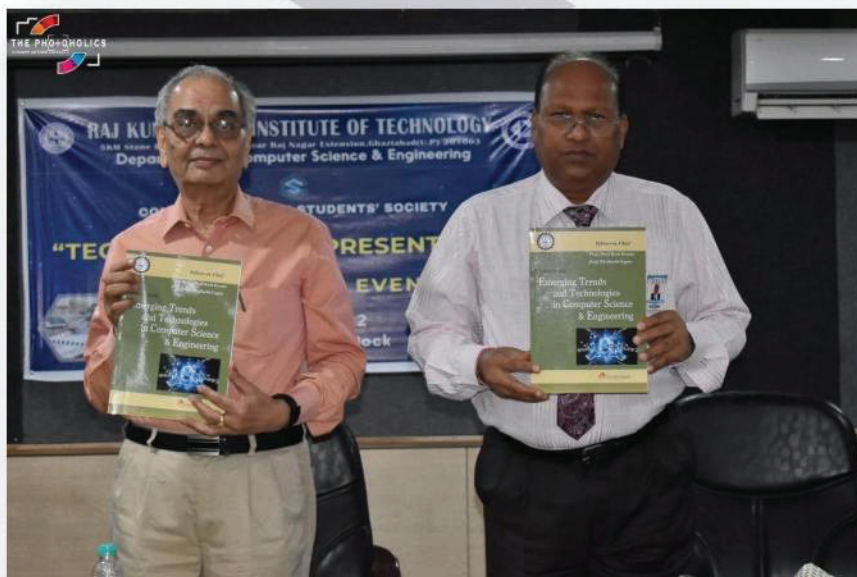
RAJ KUMAR GOEL INSTITUTE OF TECHNOLOGY
5KM Stone Delhi-Meerut Road, Near Raj Nagar Extension, Ghaziabad (U.P) 201003
Department of Computer Science & Engineering

COMPUTER SCIENCE STUDENTS' SOCIETY
presents

**"TECHNICAL PAPER PRESENTATION"
&
"BOOK LAUNCH EVENT"**

30th April, 2022
Seminar Hall, D Block

On the 30th of April 2022, Department of Computer Science & Engineering, RKGIT organized a Technical Paper Presentation Competition and Book Launch Event. The event was organized under the banner of the Computer Science Students Society, under the guidance of Professor Dr. Sachi Gupta, Asst Prof. Nidhi Gupta, Asst Prof. Mr Vineet Srivastava, Asst Prof. Rinki Tyagi and Asst Prof. Anjali Yadav.



The Technical Paper Presentation event hosted a total of 34 teams. These Groups had written their papers on the latest technologies under the guidance of respective faculty members.

The event started with the welcome address delivered by Prof. (Dr.) D.R. Somashekar, Director, Raj Kumar Goel Institute of Technology. He introduced the book to the audience and gave a brief outline of the various research work published in the book. This Book included various types of research papers of the students.

The panel of judges boasted of several dignitaries from the CSE department. The diverse panel of judges ensured a fair and unbiased judgment of the competition.



After the felicitation of the judges and other dignitaries, the participating teams were eager to present their ideas and innovations. It was indeed a sea of brilliance, as team after another came forward armed with incredible, original prototypes, research papers and advancements. Fielding question after question by the judges, the participants displayed their undying thirst for knowledge, whilst showcasing their immense interest and the astonishing amount of effort and research put into each of their individual presentations.

All in all, the event was a roaring success.

UPCOMING EVENTS



"Participation gives you experience to upgrade your qualities, qualities makes you perfect to enhance your stardom"

Ad-tech



Ad-tech New Delhi is all about what's trending in the digital ecosystem. An unparalleled marketplace where marketing technologies and media communities come together to share trends, insights, disruptive technologies that's shaping the digital economy.

Ad-tech brings up the brightest and the most influential brands, agencies, publishers and technology services to the table. The event aims to create an environment for synergy between marketing, technology and media, and is slated to leave meaningful collaborations in its wake, by influencing 4000+ decision makers at a go.

Date: 26-27 April 2022

Venue: The Leela Ambience, Gurugram Hotel

Link: <https://10times.com/ad-tech-new-delhi>

ng-India 2022



ng-India is the largest gathering of Angular community in India. With around 400 people expected at the 2022 edition, you will meet the creators of Angular, RxJS Core team members, GDE, MVP, Authors coming from the various countries of the world to teach you Angular. Join to learn, network, recruit and befriend like-minded people.

Date: 21 May 2021

Venue: The Leela Ambience Convention Hotel, Delhi

Link: <https://www.ng-ind.com/>

INTERNATIONAL CONFERENCE ON CYBER LAW, CYBER CRIME AND CYBER SECURITY



The International Conference on Cyberlaw, Cybercrime & Cybersecurity aim is to examine and analyse the emerging Cyberlaw, Cybercrime and Cybersecurity trends of today's times. The International Conference will be attended by various international delegates and speakers as also representatives from the national Diaspora representing the stakeholders in the digital ecosystem and alive web. These would include representatives from the Central Government & State Governments, various Ministries, Law Enforcement Agencies, Police, Business, Information Technology, Corporate Sector, Academicians, Scholars, Service Providers, International Organizations and distinguished thought leaders.

Date: 29 April 2022

Timing: 9:00 AM - 7:30 PM (General)

Venue: Virtual event, New Delhi

Link: <https://10times.com/international-conference-on-cyber-law-cyber-crime>

ACHIEVEMENTS



"The level of our achievements is limited only by our imagination and no act of kindness, however small, is ever wasted."

Ayush Gupta, 2nd year has participated and secured **1st** position in **Nukkad Natak** held at **GL bajaj institute of management and research, Noida** .



Ashutosh Yadav, 2nd year has participated and secured **1st** position in **Nukkad Natak** held at **GL Bajaj institute of management and research, Noida** .



FACULTY CORNER



**"If you are planning for a year, sow rice;
if you are planning for a decade, plant trees;
if you are planning for a lifetime, educate people"**

“No sun outlasts its sunset but will rise again and bring the dawn”



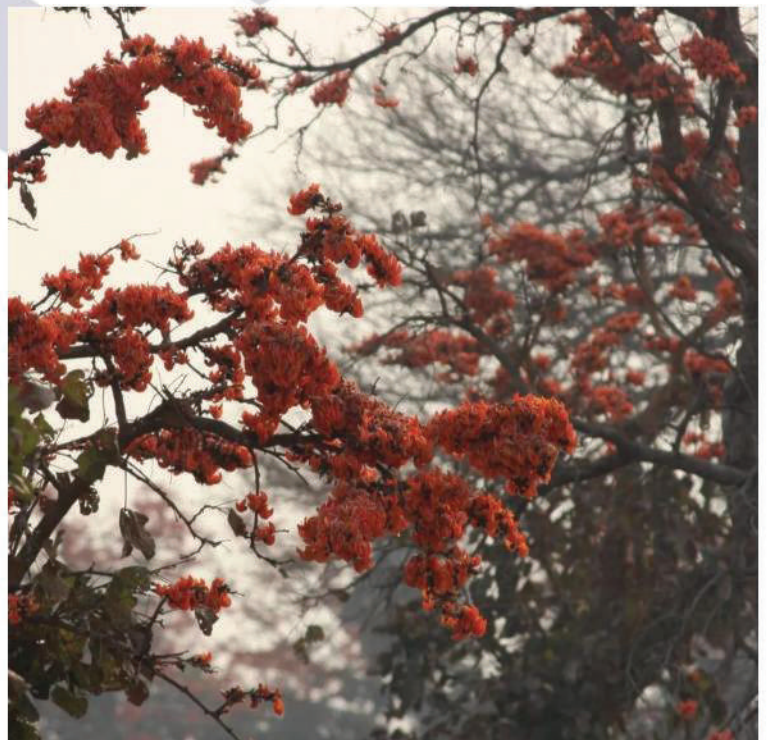
“Anyone can love a rose, but it takes a lot to love a leaf. It’s ordinary to love the beautiful, but it’s beautiful to love the ordinary.”



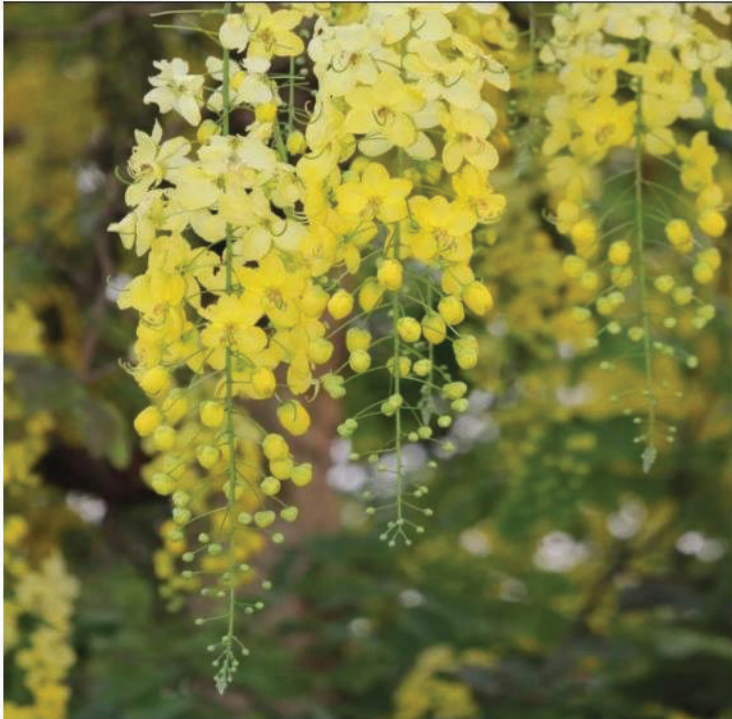
“You either die a hero or live enough to see yourself to be a villain”



“If you tend to a flower, it will bloom, no matter how many weeds surround it.”



“Flowers whisper ‘Beauty!’ to the world, even as they fade, wilt, fall.”



“If you look the right way, you can see that the whole world is a garden.”



PRIDE

Look those eyes,
Eyes looking to the flag,
Absolute in it's soul,
Nothing succed nothing lag.
Under it's shadow,
In certain prestigious way,
Fog of all hallucinations,
Have flown away.
One is my eternal sense,
Let me have the pride of my existence.

BY-

TARACHAND VERMA

ASSISTANT PROFESSOR

STUDENT'S CORNER



**"You can't use up creativity.
The more you use, the more you have"**

राही सफर जिंदगी का जरा छोटा है
फिर क्यों बात-बात पर रोता है
हस हस के गुज़ार हर एक पल
आखिर किसने देखा है कल ।
जो ठान वो कर के मान
खाली हाथ चलना कुछ ठीक नहीं
ये जिंदगी है! भीख नहीं।
पोयठ सच का हाथ थामे रख
धैर्य तू बांधे रख
कामयाबी सबको चाहिए,
बस तू मंजिल पे निशाना साथे रख।।

Ashutosh Kumar
2nd year, Section-c



Ananya Lal
2nd year, Section-a



Vinamra Gupta
2nd year, Section-d



Yash Badoniya
2nd year, Section-d

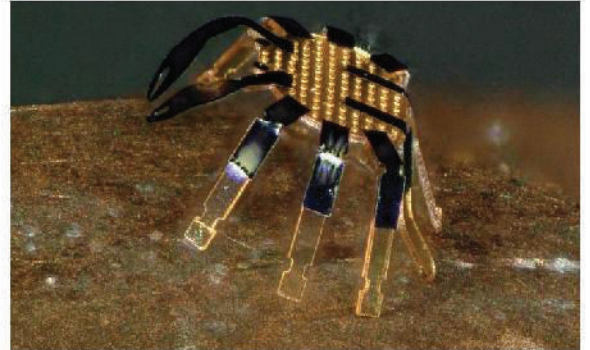
ARE U MISSING WHAT'S NEW



"Technology unlocks a chance to connect everything together in a new way & is dramatically transforming how we live"

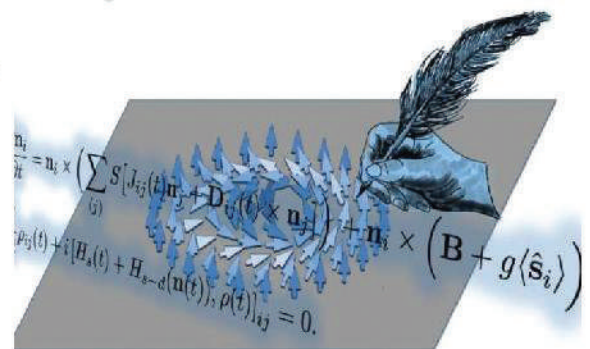
Tiny robotic crab is smallest-ever remote-controlled walking robot.

Northwestern University engineers have developed the smallest-ever remote-controlled walking robot and it comes in the form of a tiny, adorable peeky-toe crab. Just a half-millimeter wide, the tiny crabs can bend, twist, crawl, walk turn and even jump. Although the research is exploratory at this point, the researchers believe their technology might bring the field closer to realizing micro-sized robots that can perform practical tasks inside tightly confined spaces. The engineers built it using a special shape-memory alloy that transforms into a particular shape in its “memory” when heat is applied. The researchers use a focused laser beam to apply localised heat to different parts of the tiny robot in a particular sequence. Due to the properties of the alloy and the small shape of the robot, each “limb” cools down really fast after heat is no longer applied. As the shape of different limbs changes due to this heating and cooling, the robot moves in a particular way, depending on the sequence in which the laser is applied.



Researchers create exotic magnetic structures with laser light.

Research at Lund University in Sweden has found a new way to create nano-sized magnetic particles using ultrafast laser light pulses. The discovery could pave the way for new and more energy-efficient technical components and become useful in the quantum computers of the future. Magnetic skyrmions are sometimes described as magnetic vortices. Unlike ferromagnetic states—which occur in conventional magnets such as compasses and refrigerator magnets—the skyrmion state is quite peculiar: the orientation of the magnetization does not point in the same direction everywhere in the material, but is instead best described as a kind of swirling magnetism. Skyrmions are of great interest to both basic research and industry, as they can be used to manufacture more compact computer memories. However, that is easier said than done. Using skyrmions for technical purposes requires efficient ways of writing, erasing and manipulating the particles on short time scales, and with high spatial precision.



INTERNSHIPS



"Study what you love and intern in what you want to do"

Mobile App Development

Vandhana Valaguru

Work From Home

START DATE

Immediately

DURATION

3 Months

STIPEND

10000/Month

APPLY BY

July 29, 2022

SKILLS REQUIRED

- Android
- Firebase
- IOS
- React Native
- Rest API

Who can apply?

Only those candidates can apply who:

- Are available for the work from home job/internship
- Can start the work from home job/internship between 24th Jan'22 and 28th Feb'22
- Are available for duration of 4 months
- Have relevant skills and interests

*Woman wanting to start/restart their career and also apply.

PERKS

- Letter of recommendation

NUMBER OF OPENINGS

2

LINK: <https://internshala.com/internship/detail/mobile-app-development-work-from-home-job-internship-at-vandhana-valaguru1657884472>

Machine Learning Engineering

IIT Bombay

Work From Home

START DATE

Immediately

DURATION

6 Months

STIPEND

5000/month + incentives

APPLY BY

July 26, 2022

SKILL(S) REQUIRED

- Algorithm
- Data structures
- Machine Learning
- Python

Who can apply?

Only those candidates can apply who:

- Are available for the work from home job/internship
 - Can start the work from home job/internship between 24th Jan'22 and 28th Feb'22
 - Are available for duration of 4 months
 - Have relevant skills and interests
- *Woman wanting to start/restart their career can also apply.

PERKS

- Certificate
- Letter of recommendation
- Flexible work hours
- 5 days a week

NUMBER OF OPENINGS

6

LINK: <https://internshala.com/internship/detail/machine-learning-engineering-work-from-home-job-internship-at-iit-bombay1657550235>

FUN SECTION



"PLAY is our brain's favourite way of learning."

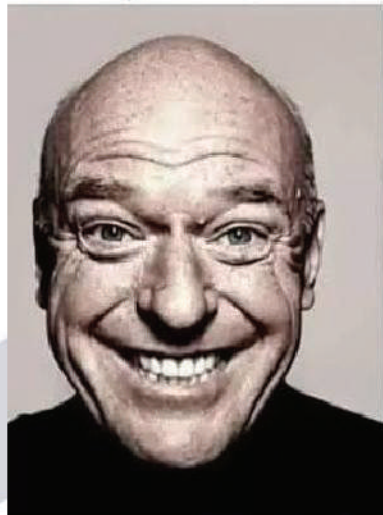
When you finally figure out why your code had that one bug



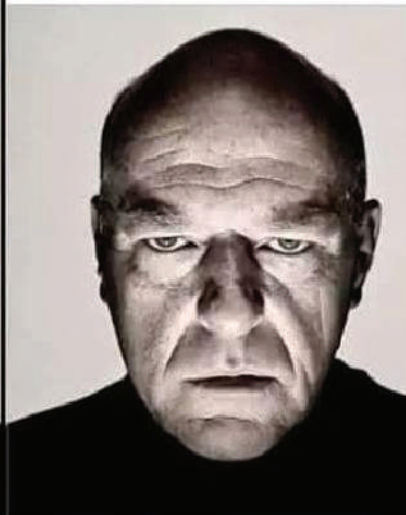
When my mom asks why you drink too much coffee while coding



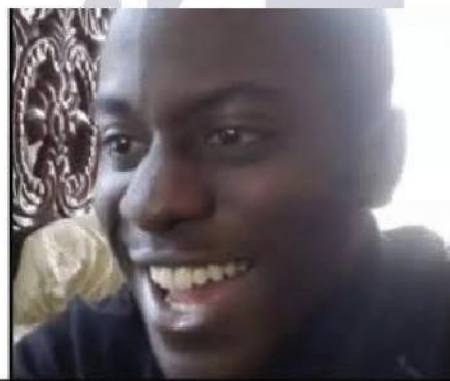
C
Programmer
learning
Python



Python
Programmer
learning C



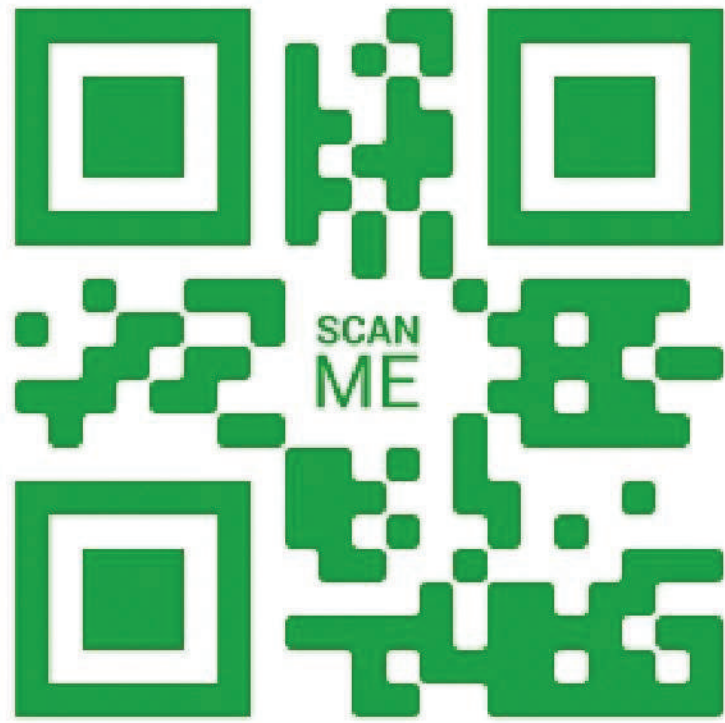
Python is the
easier language
to learn.
No brackets,
no main.



You get errors
for writing an
extra space



INSTA: RATHAN.CAGE





BYTES
NOT JUST ONES
AND ZEROS



Follow RKGIT on Social Media:



@rkgit_



@rkgit_



@rkgit ghaziabad



@rkgitgzb

BYTES

VOLUME:10 ISSUE:4

MARCH - APRIL

2021-2022

FOR ANY SUGGESTIONS PLEASE CONTACT US AT:

Bytescse@rkgit.edu.in

