



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

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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.

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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"

Aman Dhattarwal



Aman Dhattarwal is an Indian educator, career counselor, public speaker, social media influencer, YouTuber, and entrepreneur. Of his various endeavours, he is most famous for his YouTube channel, which is recognised and acclaimed by a substantial number of students. He has 6 Youtube channels with

4.4 million subscribers on his main channel, as well as over a million followers on his other channels, Apni Kaksha and Apna College. In addition to educational videos, he also creates videos on various topics, including college reviews, motivational videos, etc.

Aman was born on March 4th, 1997 in a small village in Rajasthan. Later on, his family shifted to Delhi. He completed his schooling at Delhi Public School, New Delhi. He then did his B.Tech. from NSIT Delhi, which is well known for its highest packages. He started his YouTube journey in 2015 with the video " Tips for 12th board exams that you shouldn't miss" when he had just passed his 12th standard and eventually started posting educational videos and videos about his college

experience, which included anecdotes, advice as well as tips on how to maximise college life. His content proved to be extremely relatable to students, and that is what really helped him gain that engagement and those numbers.

He then started another channel, “ApniKaksha”. This channel is focused on learning tutorials for IIT-JEE aspirants as well as placement tips, Java, Python programming, web development, Git, GitHub, etc. And began to overhaul the flawed Indian education system, where most coaching facilities imposed high costs on students who wanted to prepare for admission tests. In search of professors and excellent education, students were forced to relocate from one location to another. Additionally, they were separated into batches, and only the pupils from the best collection were given a chance to study under the most accomplished mentors.

In 2020, he began working on a scheme to offer every kid the highest-quality education from the most outstanding teachers at incredibly reasonable prices and in every city. He assembled a team of more than 70 professors, which he unexpectedly revealed to all the pupils on July 21, 2021. All the instructors he brought were unquestionably subject matter experts and the most incredible mentors ever.

And owing to such diverse and illuminating content, he is recognised by millions of students and has done over 6 TedX, 60+ seminars at various renowned colleges like IITs, IIITs, NITs, SRCC, BITS Pilani, Jadavpur University, and many more.



“I believe that if one wants to succeed, that person should have the guts to challenge the risk to lose, once they have achieved this stage, they are prepared to fight a war to win”, said Aman Dhattarwal at the Tedx Bennett University. At the relatively early age of 22, Aman Dhattarwal amassed a million-dollar fortune. He was able to create exactly what the audience wanted and made an impact on a lot of people through his YouTube channel . He serves as an excellent example for youngsters across India.

TECH BYTES



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

5G

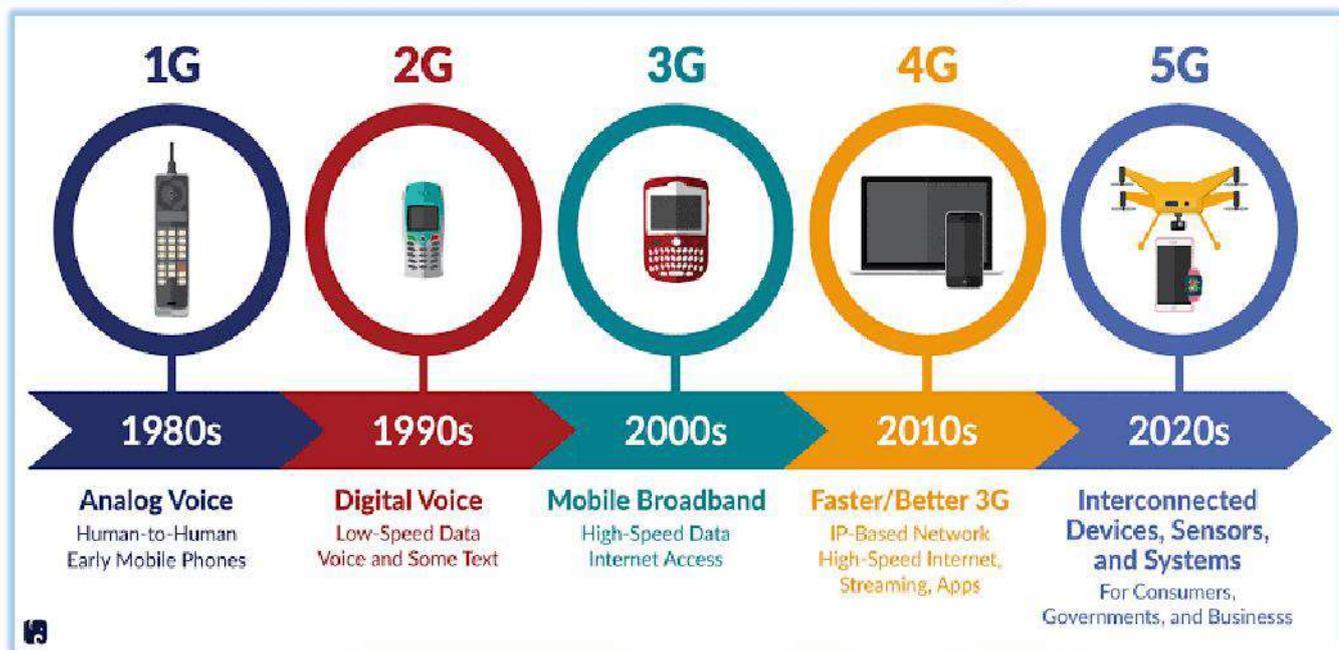
What is 5G?

5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks. 5G enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices. 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users. Higher performance and improved efficiency empower new user experiences and connects new industries.

What are the differences between the previous generations of mobile networks and 5G?

The previous generations of mobile networks are 1G, 2G, 3G, and 4G.

The difference between the previous generations of mobile networks is described in the following image:



Advantages:

There are many benefits to using 5G Ultra-Wideband, including the advantages of 5G speed.

1. Up to 10x faster than what you have now. So, all your downloads take a fraction of the time—get a movie in minutes, or a song in seconds.
2. Faster and safer than public Wi-Fi. So, you can say goodbye to slow speeds when you need to get online, on the go. Be your own hotspot and stop worrying about hackers or snoopers.
3. Video and audio in HD. So, you can stream video and video chat without Wi-Fi, with fewer frozen faces from your family or coworkers.
4. You can stream, share, post and work without being slowed down by everyone around you when connected.

TECH NEWS



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

iPhone 14 release update

According to rumors, the iPhone 14 will be launched at the first autumn or fall event of 2022, which is supposed to take place on 6 September.



Twitter brings new update

Twitter has announced that a new feature that allows you to extract a short audio clip from a Twitter space is rolling out widely on iOS and Android.



Google Rolls out Android 13

Android 13 has been released for tablets and foldable devices. The latest OS comes with a slew of features that give a significant overhaul to the user interface.



Samsung Z Flip 4 launched

Samsung launched new clamshell foldable smartphone named Samsung Galaxy Z Flip 4. The phone will be available in Blue, Bora Purple, Graphite, and Pink Gold colors. It is offered in three RAM + storage configurations – 8GB + 128GB, 8GB + 256GB, and 8GB + 512GB.



Galaxy Buds 2 Pro Released

The Galaxy Buds 2 Pro offers a design like its predecessor. The wearable comes with active noise cancellation, which can cancel out ambient noises up to 33dB, the device is said to provide up to 29 hours of usage.



EVENTS



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

Placement Induction Program

A placement induction program for pre-final year students was conducted on 19 May 2022. This program was for pre-final year students, in which the placed students of final year motivated the students with their inspiring journey.

In the seminar, the students of final year shared their experience of placement drives and interviews of different companies and they also gives some tip and tricks to the pre-final year for the upcoming placement drives.



The session was successfully conducted. More than 250 students attended the session and a few dedicated faculty members also shared a great part.

UPCOMING EVENTS



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

TECHSPO



TECHSPO Delhi NCR is a technology expo that showcases the next generation of technology & innovation; Contextual Tech, AR, VR, IoT, Wearable, Mobile, Internet, 3D Print & Emerging Technology. TECHSPO Delhi NCR is a 2-day technology expo taking place September 14 – 15, 2022 at the luxurious Hyatt Regency Gurgaon in New Delhi, India. TECHSPO Amsterdam brings together developers, brands, marketers, technology providers, designers, innovators and evangelists looking to set the pace in our advanced world of technology. TECHSPO Delhi NCR 2022 will play host to some of the finest innovators, entrepreneurs, founders and business owners. Educators, students, investors, senior marketers and branders, digital executives and professionals, web & mobile application developers, strategists, designers and web project managers, business leaders, business developers, thought leaders and other professionals like you who operate in the broad technology industry from around the world will gather to attend TECHSPO Delhi NCR Technology Expo.

Date: 29-30 October 2022

Venue: New Delhi NCR NH8, Sector 83, Gurugram

Link: <https://10times.com/techspo-gurgaon>

SMART Mobility Tech Expo 2022



India's roads are becoming increasingly congested and unlivable. With the rapid increase in vehicle population, the government is looking into modern and smart solutions and technologies to control the situation. Many companies and startups are coming up with smart road traffic management systems. These modern systems are technology solutions that can be integrated into traffic cabinets and intersections for fast and cost-effective improvements in traffic flow and road safety. By deploying these systems, or by upgrading a city's existing intelligent transportation systems (ITS) infrastructure, India can create efficient and cost-effective systems for road safety.

Date: 25-27 October 2022

Venue: Hall No 7,8,9,10,11,12, Pragati Maidan Exhibition Centre, Pragati Maidan, New Delhi

Link: <https://www.eventbrite.com/e/smaobility-tech-expo-2022>

EdTech Expo



At EdTech Expo 2022, you get an influential platform where companies, institutions, professionals, students community come together, share information and build long-lasting business relationships. If you are looking to build awareness of your brand in the emerging communications market, it doesn't get bigger than EdTech Expo'22 in New Delhi. In established economies, exhibitions are a vital part of product marketing, along with direct selling, advertising, direct mail and the Internet. In new and emerging markets, they serve as a major stimulus for industrial and commercial development.

Date: 4-5 October 2022

Timing: 9:00 AM - 7:30 PM

Venue: Indra Gandhi Stadium Complex, New Delhi, India

Link: <https://www.technoxian.com/edutechexpo/>

ACHIEVEMENTS



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

Faculty Section

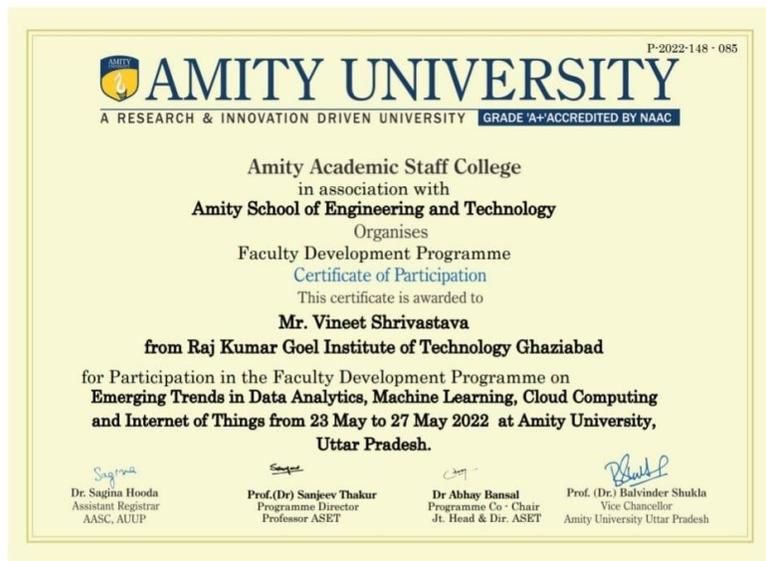
Mrs Nidhi Gupta, CSE Department, RKGIT has Participated in the one week “F.D.P” organized by the **Department of English & Foreign Languages.**



Mr Vineet Shrivastava, CSE Department, RKGIT has successfully completed “**Overview of Data Visualization**” an online non-credit project authorized by **coursera.**



Mr Vineet Shrivastava, CSE Department, RKGIT has participated in “Faculty Development Programme” organized by Amity University.



Mr Vineet Shrivastava, CSE Department, RKGIT has participated in “IP Awareness/Training Program” under National Intellectual Property Awareness Mission .



Mr Vineet Shrivastava, CSE Department, RKGIT has successfully granted with international patent on topic “Machine Learning and Artificial Intelligence based Intelligent Controlling and Monitoring System For An Automatic Air Conditioner” by Commissioner of Patents.



**CERTIFICATE OF GRANT
INNOVATION PATENT**

Patent number: 2021103400

The Commissioner of Patents has granted the above patent on 16 March 2022, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

Parmod Kumar of Faculty, School of Energy & Electromechanical Eng Hunan University of Humanities, Science and Technology, Loudi City, Hunan 417000 China

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Title of invention:
MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE BASED INTELLIGENT CONTROLLING AND MONITORING SYSTEM FOR AN AUTOMATIC AIR CONDITIONER

Dated this 16th day of March 2022
Commissioner of Patents



PATENTS ACT 1990
The Australian Patents Register is the official record and should be referred to for the full details pertaining to this IP Right.

Ms Vernika Singh, CSE Department, RKGIT has successfully completed **“Overview of Data Visualization”** an online non-credit project authorized by **Coursera**.



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"**

“The waterfall winks at every passerby.”



“Monument is built to commemorate things and people.”



“The night walked down the sky with the moon in the hand.”



“That tower of strength which stood four square to all the winds that blew.”



EQUILLIBRIUM

Don't you think?

everything is trembling around you.

from Corner to blunt edge,

from freedom to what trapped in cage.

zenith to deep bottom.

shivering hearts and meandering emotions,

things stable, flying and creepy motion.

wanted to reach equilibrium.

me in centre of this,

can see the collective storm,

moving and stable creatures,

thoughts, believes, dreams and nature,

almost;

Inside sea, all will be drowned soon.

Nothing will survive,

'Nothing' is the biggest sea,

something always rise in it's lap.

and happenings and sequences,

give the meaning to livelihood.

STUDENT'S CORNER



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

खड़ा मजदूर ,
था मजबूर ,
थक के चूर ,
भीड़ में था वह अकेला
देख रहा जानवरों का मेला
पेट में न अनाज का दाना था
भूख ने भी हार माना था
उसका दुख किसी को नहीं दिखता,
इसलिए पोथि लिखता:-
जरा उस पर भी ध्यान दो
न राजनीति वाले बयान दो
तुम उसकी मेहनत का ही खाते,
उसकी बनाई सड़को पे ऑफिस जाते,
उसकी बनाई मकानो में आराम फरमाते
हो,
बेशर्म फिर भी नहीं शर्मते हो ।
क्यों तुम उसको रुलाते

भूखे पेट उसे सूलाते
क्यों आगे बढ़ने से उसे रोकते हो
क्यों कुत्तों की भांति भोंकते हो?

Ashutosh Kumar
2nd year, Section-c





Yash Badoniya
2nd year, Section-D

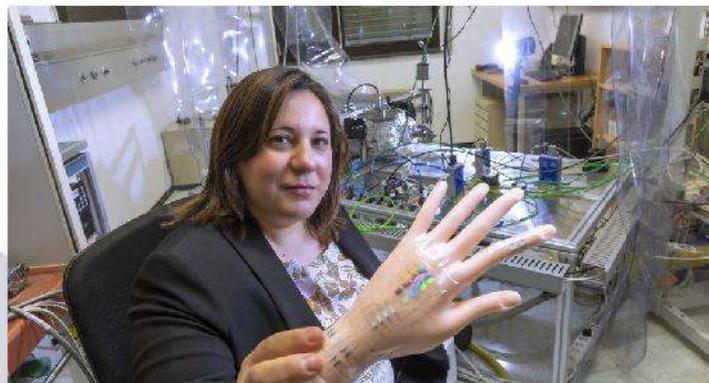
ARE U MISSING WHAT'S NEW



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

Electronic skin: Physicist develops multisensory hybrid material

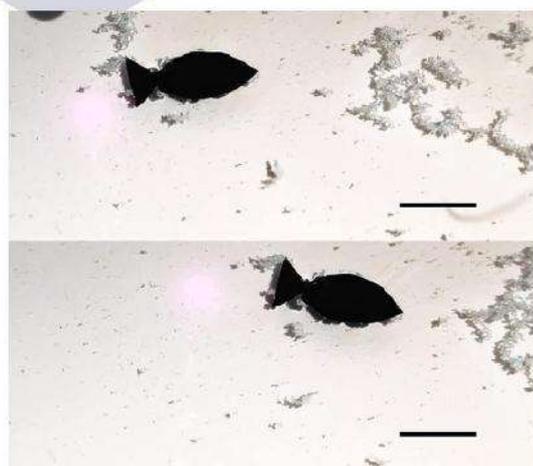
The "smart skin" developed by Anna Maria Coclite is very similar to human skin. It senses pressure, humidity and temperature simultaneously and produces electronic signals. More sensitive robots or more intelligent prostheses are thus conceivable. Physicist at TU Graz develops multisensory hybrid material. The result



is a wafer-thin material that reacts simultaneously to force, moisture and temperature with extremely high spatial resolution and emits corresponding electronic signals. With 2,000 individual sensors per square millimetre, the hybrid material is even more sensitive than a human fingertip. Each of these sensors consists of a unique combination of materials: an smart polymer in the form of a hydrogel inside and a shell of piezoelectric zinc oxide. The human skin perceives things from a size of about one square millimetre. The smart skin has a resolution that is a thousand times smaller and can register objects that are too small for human skin (such as microorganisms).

Tiny fish-shaped robot 'swims' around picking up microplastics

Microplastics are found nearly everywhere on Earth and can be harmful to animals if they're ingested. But it's hard to remove such tiny particles from the environment, especially once they settle into nooks and crannies at the bottom of waterways. Now, researchers in ACS' Nano Letters have created a light-activated fish robot that "swims" around quickly, picking up and removing microplastics from the environment. Soft robots are usually made of hydrogels and elastomers that can be damaged easily in aquatic environments. So the researchers turned to another material called mother-of-pearl, also known as nacre, that is strong and flexible and is found on the inside surface of clam shells. This material has a microscopic gradient, going from one side with lots of calcium carbonate mineral-polymer composites to the other side with mostly a silk protein filler.



INTERNSHIPS



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

Mobile App Development

Property Bhavan Private Limited

Work From Home

START DATE

Immediately

DURATION

4 Months

STIPEND

2000/Month

APPLY BY

August 19, 2022

SKILLS REQUIRED

- Android
- Firebase
- Flutter
- Java
- 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
- Certificate
- Flexible work hours

NUMBER OF OPENINGS

2

LINK: <https://internshala.com/internship/detail/mobile-app-development-work-from-home-job-internship-at-property-bhavan-private-limited1658927644>



Web Development

Garia

Work From Home



START DATE

Immediately

DURATION

6 Months

STIPEND

10000/month + incentives

APPLY BY

August 19, 2022

SKILL(S) REQUIRED

- Amazon web server(AWS)
- CSS
- Express.js
- MongoDB
- Node.js
- React.js
- HTML
- JavaScript

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

NUMBER OF OPENINGS

6

LINK: <https://internshala.com/internship/detail/web-development-internship-in-garia-at-quordnet-academy1659673154>

FUN SECTION



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

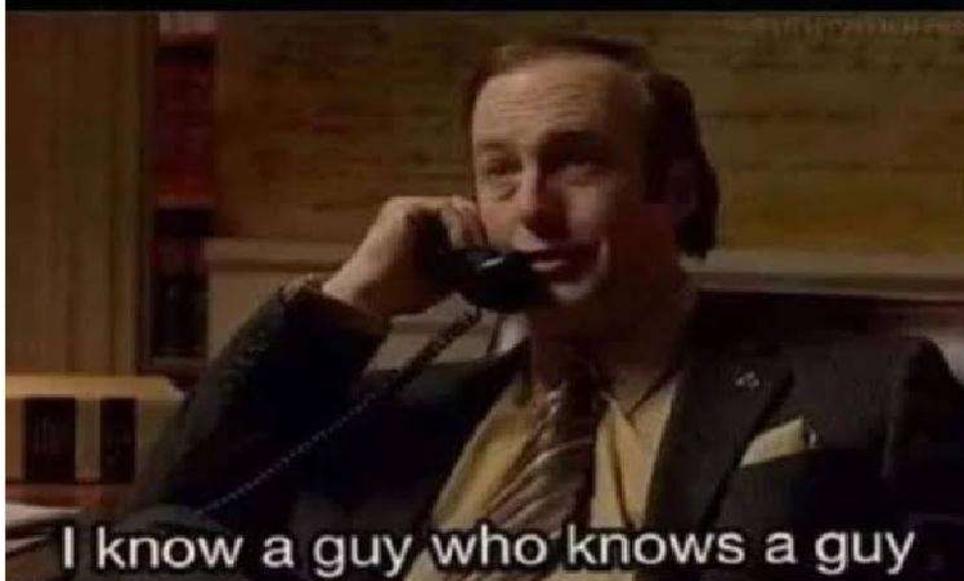
Them: How long have you been programming?

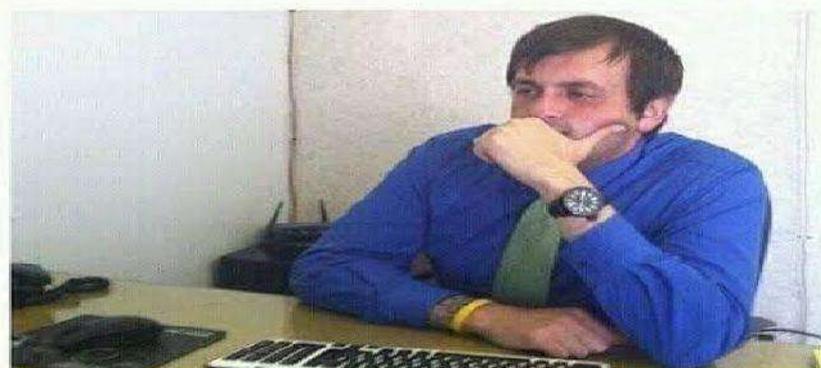
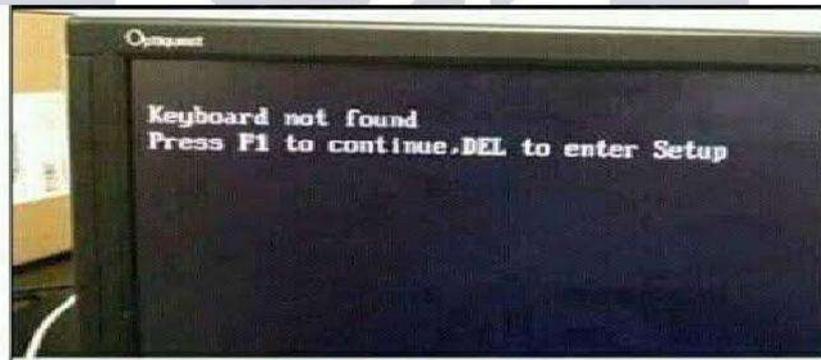
Me: Since high school

Them: So you're a good programmer?



Linked List data structures be like:









BYTES
NOT JUST ONES
AND ZEROS



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