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.

FOR ANY DETAILS OR QUERY CONTACT:
Bytescse@rkgit.edu.in

Contents

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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 Gupta

Aman Gupta is an Indian entrepreneur, investor. He is also founder & CMO (Chief Marketing Officer) of boat Lifestyle (Imagine Marketing India). He is recognised for his unique life-style. He is also an inspiration of youths. He is member of Shark(investor) Tank. Shark Tank is a platform where anyone can put their innovative ideas to judges so that they can get investments which broadcast on Sony TV. Shark Tank is inspired by US Business reality show. In India, it's second season that includes six sharks (investors) who are investors and entrepreneurs in different industries. Aman Gupta is one the popular shark in the show.

Aman was born in Delhi on 4 th March 1982(40 years as of 2022) and currently living in Maharashtra. He father name is Neeraj Gupta and mother is Jyoti Kochar. He has two siblings(One brother Anmol Gupta and one sister Neha Gupta). He tied the knot with Priya Dagar in year 2008. They are blessed with two daughters – Ada Gupta and Miraya. He is currently working as an investor(Shark) in Shark Tank(Indian Television show).

Aman Gupta Education and Career

After completing his school at DPS he took admission into Shaheed Bhagat Singh College, Delhi University in B.com in 1998. During his graduation days, Aman's father suggested him to become Chartered Accountant, and in this year 1999, he took admission into the ICAI CA program, He lost his interest in CA in between the program. Despite this, he completed his CA in 2002 and become one of India's youngest CAs After completing his CA he joined Citibank and worked there as an assistant manager

till 2005, In September 2005 along with his father, Aman started a new business named Advanced Telemedia Pvt Ltd. He was the CEO and Co-founder of the company. The company did not do well then his wife suggested to pursue MBA. In the year 2010, he was admitted to the Indian School of Business in the MBA (Finance and Strategy) program. He was also alumnus of Kellogg Graduate School of Management with an MBA. After MBA he worked in companies like KPMG where he was a Senior Management Consultant (2011-2012) and HARMAN International as Director (2012-2013). Aman and boat Aman along with Sameer Ashok Mehta founded Imagine Marketing Services Private limited in 2013. It is the parent company of brand boat. boat is a millennialcentric brand that deals in consumer audio electronics and wearable such as headphones, smartphones, speakers and many more. It has gained so much popularity in a short span of time and now is counted among top five wearable brand of India. The not-giving up attitude of Aman Gupta and his learnings from failures has helped him to make a place in the market.

Aman Gupta's Net Worth

As per GQ India, the net worth of Aman Gupta is 10500 crores (105000 million).

Aman as an Investor

Aman Gupta was already an active investor before joining the reality show. He has invested in several companies and the start-ups. Some of his investment are listed here Shiprocket, WickedGud, Skippi Ice Pops, 10 Club, FREECULTR, Bummer, The Reenal Project, Anveshan and many more.

Interesting Facts about Aman Gupta

● Aman Gupta is one of the youngest CAs in India. He completed his CA in the year 2022 when he was just 20.

● Aman is very much inspired by Jeff Bezos.

- He is also the chairman of the D2C council in the Internet and Mobile Association of India.

- BoAt use influencers to promote the brand and these brand influencers are called "boAtheads". These brand influencers include Kaira Advani, Hardik Pandya, Shreyansh Iyer, Diljit Singh.

- These days he has gained popularity for being a judge in the first season pf Shark Tank India.

- He has been felicitated with various awards. These include – the Businessworld Young Entrepreneur award in 2019, Entrepreneur of the year in 2020.

- He was also listed in Economic Times as 40 under 40 in the year 2021.

- He has been also awarded the title the Most Stylish Entrepreneur in Lokmat Most Stylish Awards.
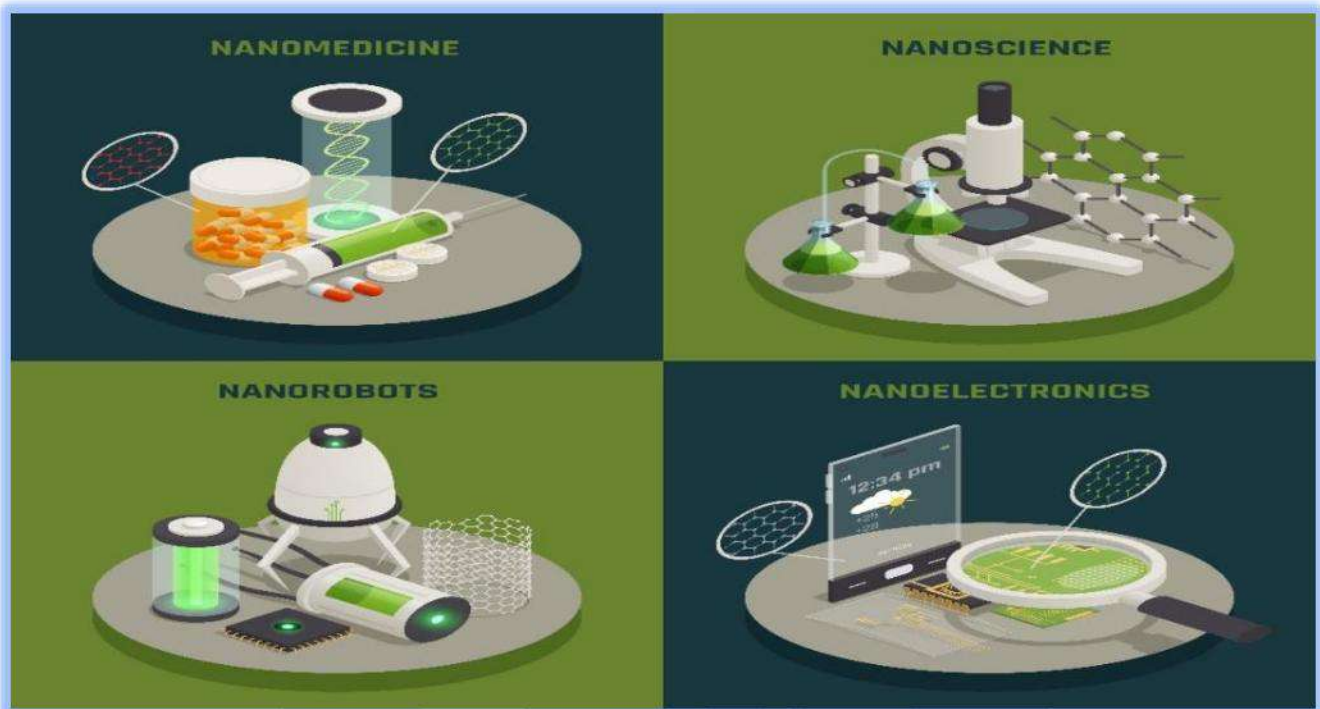
"The best way to predict the future... is to invent it"

NANOTECHNOLOGY

This is the era of technology where everything is changing every minute and every second. As the technologies are increasing day by day and the size of the devices is decreasing day by day. The whole world is moving so fast by using technology. It looks amazing when you think that the bigger things are getting smaller, just think about the very first computer, yes that computer was about 50 feet long and now we can even smoothly run the internet on our wristwatch. So, this is nanotechnology. Nanotechnology is one of the emerging technologies that are rapidly expanding in the world. Nano is a Greek word that means very small and technology refers to the way we are using scientific knowledge to perform practical purposes. In this technology, we take nanoparticles in the work which lies in the range of 1nm to 100nm. Even though it works with smaller particles, it has very high power. We can increase energy power consumption by using nanotechnology. The major advantages of this technology are –

1. Having lesser weight as compared to other products
2. Having smaller size as compared to other products
3. Require less energy and raw material to form products

Nanomaterials are generally categorized into two main parts:

Natural Nanomaterials As the word already suggests, those materials occur naturally in the world. It includes particles like volcanic ash, smoke, and haemoglobin.

Artificial Nanomaterial is a material that either occurs from objects or is processed by humans.

"Our Future success is directly proportional to our ability to understand, adopt and integrate new technology into our work"
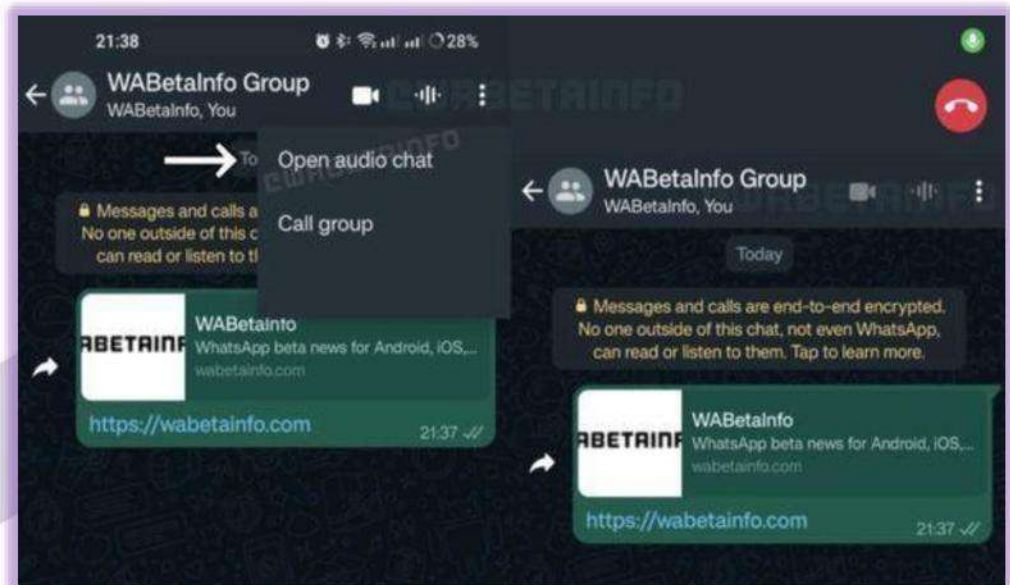
WhatsApp Working on New Audio Chats Feature

WhatsApp's new "audio chats" feature for Android phones is reportedly in the works, according to the latest report. The new function was spotted by WABetaInfo in the latest WhatsApp beta for Android 2.23.7.12. The report claims that audio chats will be rolled out in a "future update" of the popular messaging app. While WhatsApp hasn't released a statement about the new feature, there's some speculation about it, thanks to the screenshots shared by the publication.

The image includes a new "waveform" icon at the top of the chat. Selecting it opens up two options - "Open audio chat" and "Call group." The new option could allow users to switch between audio and text chats. The screenshot also shows a red disconnect icon for hanging up ongoing calls on top of the chat header, with empty space to its left. According to the report, the space could be used to display audio waveforms in real time.

The publication adds that audio chats are currently under development and are only available in beta. A stable version will likely be released soon for all users in a future update.

iPhone 15 Series eSIM Only Variant to Be Available in More Countries.

Apple iPhone 15 series with eSIM-only connectivity could be available in more countries this year. A new rumour suggests that Apple is willing to push the eSIM technology on its iPhone in more countries. The trend started last year with the launch of the iPhone 14 series, which only offered eSIM connectivity for the US market, skipping the physical SIM slot. Apple, however, retained the physical SIM card slot on the iPhone 14 series for all other markets.

eSIM technology is increasingly promoted and adapted by consumers across developed markets. However, the technical challenges in the real world prevent most to use the eSIM technology and stick with the old-school physical Sim tray option. The eSIM has been available on the iPhone since 2018's iPhone Xs series and the iPhone XR. The addition of eSIM alongside the physical SIM card slot allowed for dual SIM connectivity on the iPhone. Soon after, rival brands like Google and Samsung followed the formula

Google releases Bard, its rival to OpenAI's ChatGPT

Google has finally released Bard, its AI-powered chatbot, in response to OpenAI's ChatGPT. it is an AI chatbot powered by a "lightweight and optimized" version of LaMDA, which is a research large language model

(LLM). Google says Bard will be updated with newer, more capable models over time—similar to rival ChatGPT, which just got a new LLM called GPT-4. The new chatbot will be available only to a limited number of users in the US and UK and will accommodate additional users, countries, and languages over time, as per the tech giant. Instead of being integrated with Google's Search engine, Bard is currently a stand-alone webpage for a quick one-on-one conversation.

Google admits that Bard is still "an experiment" and has its own shortcomings that stem from the faults of an LLM. Because LLMs "learn from a wide range of information that reflects real-world biases and stereotypes, those sometimes show up in their outputs," highlighted Google.

"And they can provide inaccurate, misleading or false information while presenting it confidently." One can sign up to try Bard at bard.google.com.

EVENTS

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

Binaryhacks event organised by "BINARY " (2DAYS Workshop & 36 hr hackathon)

A hackathon, also known as a codefest, is a social coding event that brings computer programmers and other interested people together to improve or build a new software program.The word hackathon, which means clever programmer, and marathon. The concept of the hackathon, also called a hack day or hack fest, was born out of the open source community. The first event labeled a hackathon was the OpenBSD Hackathon in Calgary, Canada, on June 4, 1999.

It makes you better with this motivation, Rkgitians participated in the events "Binaryhacks "organised by BINARY in which two days of workshop and 36 hours

hackathon was held . After the event winners were awarded by Director sir and Amit Singhal Sir.

Hackathon Provide opportunity to participants to learn something new. Provide space and time for participants for advancement on problems they are interested in. Develop problem solving skills. One of the most important quality someone can take away with himself is the common bond from hackathon.So, the closure of the equation is, hackathons are growing rapidly around the world and students are showing their enthusiasm towards the culture.

Empowering Minds: Himanshi Singh Inspires students with Her Journey and Wisdom

In a captivating event organized by the Computer Science Student Society (CSSS), Himanshi Singh, the renowned founder of the LET'S LEARN YouTube channel, took the stage as the esteemed guest speaker. Known for her motivational and insightful ideas, influence as a social media personality, and impressive speaking engagements at TEDx and Josh Talks.

As Himanshi Singh graced the event, the atmosphere was filled with anticipation and enthusiasm. Attendees, comprising computer science students and Professors, were eager to gain insights from her experiences and be motivated by her story.

The event provided an opportunity for attendees to interact with Himanshi Singh in a question-and-answer session as the Students eagerly asked about her experiences as a YouTuber, and her strategies for personal growth, and she came up with graceful responses for all the questions.

Himanshi Singh's words had a profound impact on the audience. Her authenticity, Empathetic, and captivating storytelling created an emotional connection with the attendees. Many found solace in her message, feeling motivated to overcome their own challenges and pursue their passions with renewed vigor. Such events do leave an everlasting impact on minds of students, sometimes even more than the four walls of the classroom.

The event featuring was an unforgettable experience for all those in attendance. Her journey, shared with authenticity and passion, served as a guiding light for the computer science students and technology enthusiasts present, through her inspirational presence, Himanshi Singh embodied the spirit of motivation, encouraging all to embark on their unique journeys with unwavering belief and enthusiasm.

Collaborative Endeavors: RKGIT and SoftPro India

In a remarkable collaboration aimed at promoting technological excellence and empowering students, an important Memorandum of Understanding (MoU) was signed on the 21st of December. The prestigious Raj Kumar Goel Institute of Technology (RKGIT) and SoftPro India Computer Technologies Pvt. Ltd., based in Lucknow, joined hands to pave the way for a fruitful partnership. The event witnessed a captivating guest lecture by Ms. Yashi Asthana, CEO of SoftPro India, along with an inspiring address by Mr. Rohit Kumar, CTO of SoftPro Group of companies.

The rapidly evolving world we live in demands a deep understanding of coding languages and a knack for staying ahead of the competition. Mr. Rohit Kumar, in his motivating speech, shed light on the growing significance of coding languages and how they have become essential skills in today's fast-paced environment. He emphasized that the key to success lies in continuously enhancing one's coding abilities, keeping up with the latest trends, and embracing technological development.

As the CEO of SoftPro India and the Co-Founder of Parivartan Ek Salah- NGO operating under the Corporate and Social Responsibility (CSR) wing of SoftPro Group of Companies—Ms. Yashi Asthana shared her valuable insights with the students during the guest lecture.

The signing of the MoU between RKGIT and SoftPro India marks a significant step towards fostering collaboration, knowledge sharing, and skill enhancement. With such collaborative efforts, the future of RKGIT students shines bright as they embark on a path towards achieving their goals and making a positive impact in the world of technology.

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

NASSCOM Annual Technology Conference 2023

NASSCOM, the National Association of Software and Service Companies, has been organizing annual technology conferences that serve as significant platforms for industry professionals and thought leaders to discuss emerging trends, challenges, and opportunities in the technology sector.

The 10th edition of the Annual Technology Conference is slated to happen in physical mode on August 29th 2023 and August 30th 2023 in Delhi, during the timings of 9:00 am to 6:00 pm. This summit is also aimed at exploring the latest trends and developments in software engineering and product development. It brings together engineering leaders, technology architects, and practitioners to discuss best practices, emerging technologies, and advancements in software engineering processes.

Exhibitions and technology showcases are a common feature of NASSCOM conferences. Companies and startups have the opportunity to display their innovative products, solutions, and technologies. Attendees can explore these exhibits and interact with the creators to gain a deeper understanding of the showcased technologies.

NASSCOM represents and advocates for the interests of its member companies, which include both Indian and multinational corporations operating in India's technology sector, and this two day event captures the essence of all that the organization is aimed at achieving, and acts as a unified voice for the industry, advocating for its interests, and spearheading initiatives to address challenges and capitalize on opportunities in the dynamic technology landscape.

ACHIEVEMENTS

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

Momin Mir of **2nd year** of **B.Pharma** secured second position in the event - SCIENCE FAIR held during World pharmacist day.

Nausheen Fatima, 2nd year of CSE core branch secured first position in the MEFT FEST conducted by Sharda University.

"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"

Programming language Dictionary

A-Arithmetic language developed by Grace Hopper in 1951.

B-Bell labs is a programming language developed at Bell labs circa 1969.

C-General purpose computer programming language developed by Dennis Ritchie in 1969.

D-Object-oriented multi-paradim system programming language.

E-Object-oriented programming language for secure distributed computing, developed by Mark S Miller, Dan Bornstien, in 1997.

F-Module-oriented, compiled and numeric computer programming developed for scientific programming and scientific computation.

G-Numerical Control (NC) programming language. It is used mainly in computer-aided manufacturing for controlling automated machine tools.

H- Hack is a programming language for the Hip Hop Virtual Machine (HHVM), created by Facebook as a dialect of PHP.

I - Interactive Data Language (IDL), is a programming language used for data analysis. It is popular in particular areas of science, such as astronomy, atmospheric and medical imaging.

J-Java is a general-purpose computer programming language that is concurrent, class-based, object-oriented, platformed independent language.

K-Is a proprietary array processing language developed by Arthur Whitney and commercialized by Kx Systems.

L- Larry McAvoy, with extensive help from Jeffrey Hobbs, Oscar Bonilla.

M-MATLAB (matrix laboratory) is a multi-paradigm numerical computing environment and 4th generation programming language.

N-Net Logo is an agent-based programming language designed foe logo programming.

O-Oak is a programming language created by James Gosling in 1991 Sun Microsystems set-top box project.

P- Perl (Practical Extraction and Reporting Language) is a family of high-level, generalpurpose, interpreted, dynamic programming language.

Q-Proprietary array processing language developed by Arthur Whitneyand commercialized by Kx systems.

R-Programming language and software environment for statistical computing and graphics.

S - Is a statistical programming language developed primarily by John Chambers Rick Becker and Allan Wilks of Bell laboratories.

T-Programming language is a dialect of the Scheme programming language developed in the early 1980s by Jonathan A. Rees, Kent M. Pitman, and Norman I.

U-Ubercode is a high level programming languagedeveloped by Ubercode Software and in 2005 for Microsoft Windows.

V-VHDL (VHSIC Hardware Description Language) is a hardware description language used in electronic design automation to describe digital and mixed-signals systems.

W-WATFIV developed at the University of waterloo is an implementation of the FORTRAN programming language.

X-XBL (XML Binding Language) is an XML-based mark-up language used to declare the behaviour and look of XUL-widgets and XML elements.

Y-Yahco Query Language (YQL) is an SQL like query language created by Yahoo as part of their Developer Network YQL is designed to retrieve and manipulate data from single Web interface .

Z-Z notation is a formal specification language used for describing and modelling computing systems.

By
Dr Pawan Kumar Goel
Associate Professor Department of CSE

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

Welcome to the world of Engineering
Choice or Imposition brought you here is what I am
inferring

Though there are various fields
Sow the seeds where blossoming of flower is
guaranteed

It's a journey of four years
Always remember, for what purpose you are here

Grief and Pain after Separation from home
Path to success is always travelled alone

Make memories to reminisce & cherish
Friendship should be everlasting, not atmospheric

Be Aware of Fake people & their friendship
It's a life lesson that you have to admit

There is only one path to success and thousand to
get derailed
Just a reminder, don't delve into detail

Enhance your skills each and everyday
You will need not to speak then, you resume will
convey

Engineering means enjoying and working hard with consistency
Time Management should be your competency

Look at your parent to know plethora of reason to be successful
Avoid wasting time, consequences will be dreadful

Hope Convocation be your blissful day
Focus on Yourself till the focus is on you legend says

Nausheen Fatima
B.Tech 2nd Year
Section C

Shikhar Singh Yadav
B.Tech 2nd Year
Section D

Shikhar Singh Yadav
B.Tech 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"

Mimicking life: Breakthrough in non-living materials

A team of researchers at Delft University of Technology has discovered a new process that could help mimic life in non-living materials, such as robots. The new process relies on fuel to control non-living materials in a similar fashion to what living cells do.

The team says the reaction cycle could be applied to a wide range of materials. Its rate can also be controlled, opening up many opportunities in this emerging field. The new development could also play a big role in future soft robotics, with soft machines sensing their environment and responding appropriately.

Chemist Rienk Eelkema and his team work on mimicking the chemical reactions in living cells, which provide the fuel needed to control the cell. These reactions drive non-living materials in the same way, but they are limited.

Soft robot detects damage, heals itself

A team of engineers at Cornell University has developed a soft robot that can detect when and where it was damaged before healing itself right away.

Rob Shepherd is an associate professor of mechanical and aerospace engineering says - Our lab is always trying to make robots more enduring and agile, so they operate longer with more capabilities. If you make robots operate for a long time, they're going to accumulate damage. And so how can we allow them to repair or deal with that damage?"

According to Shepard, the first step for self-healing capabilities is to enable the robot to identify that something needs to be fixed. To achieve this, the team created an innovative technique involving fiber-optic sensors paired with LED lights that can detect minute changes on the robot's surface.

The sensors are combined with a polyurethane urea elastomer that incorporates hydrogen bonds, which enables rapid healing. There are also disulfide exchanges that increase strength.

INTERNSHIPS

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

FRONT END DEVELOPMENT

<u>Internshala</u>

Delhi, Noida

START DATE

Immediately

DURATION

3 Months

STIPEND

10000-15000/Month

APPLY BY

18th February 2022

Skill(s) required

- CSS
- HTML
- JavaScript
- ReactJS
- Redux
- Bootstrap

Who can apply?

Only those candidates can apply who:

- Are available for full time (in-office) internship
- Can start the work from home job/internship between 3rd Feb'23 and 10th Mar'23
- Are available for duration of 3 months
- Have relevant skills and interests

PERKS

- Job Offer

NUMBER OF OPENINGS

2

LINK : https://internshala.com/internship/detail/front-end-development-internship-in-delhi-noida-at-ramaera-industries-limited1675417840?utm_source=cp_link&referral=web_share

Python Development

<u>Internshala</u>

Delhi, Ghaziabad, Noida

START DATE

Immediately

DURATION

6 Months

STIPEND

12000-15000/month

APPLY BY

15th February, 2022

SKILL(S) REQUIRED

- python
- Cloud computing
- REST API
- Git
- SQL

Who can apply?

Only those candidates can apply who:

- Are available for full time (in-office) internship
- Can start the work from home job/internship between 1ST Feb'23 and 8th Mar'23
- Are available for duration of 6 months
- Have relevant skills and interests

PERKS

- Certificate
- Letter of Recommendation

NUMBER OF OPENINGS

1

LINK : https://internshala.com/internship/detail/python-development-data-engineering-internship-in-multiple-locations-at-probyto-ai1675231916?utm_source=cp_link&referral=web_share

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

First Year
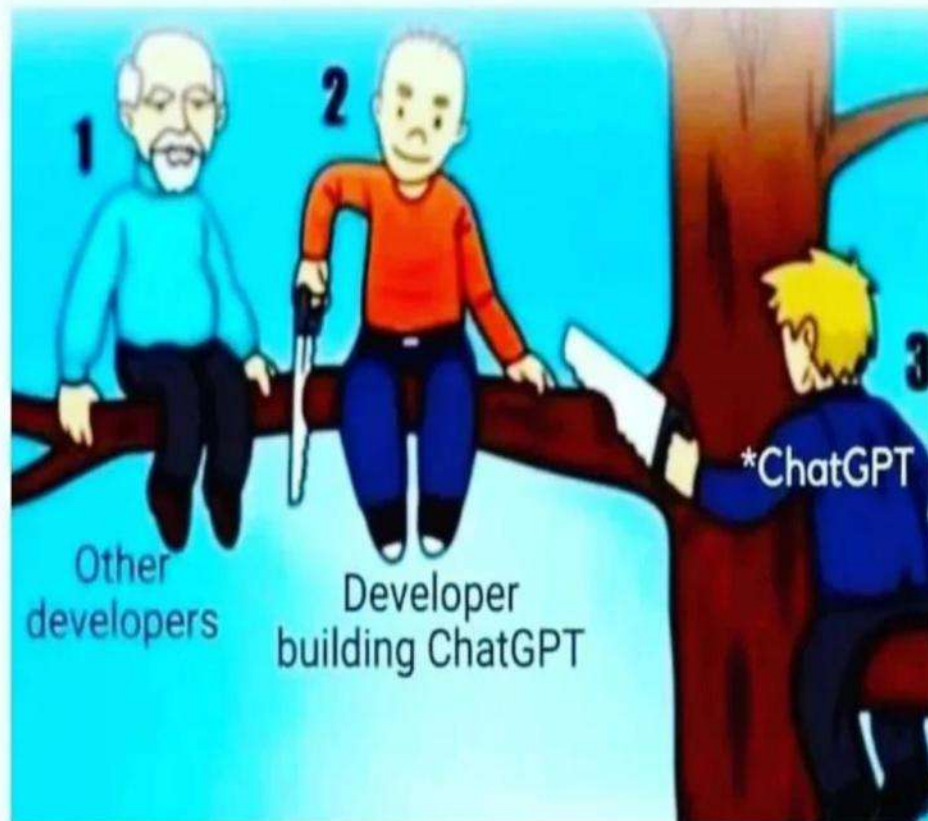
Final Year

I will go into Google
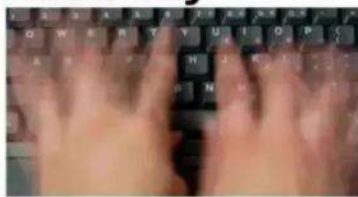
Can someone plz help me to clear my interview to get a job ?

1 Other developers

2 Developer building ChatGPT

3 *ChatGPT

How people think programmers spends their day

Lo-fi Coding

How programmers actually spends their day

Why do Astronauts use Linux?

Because they can't open Windows in space

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