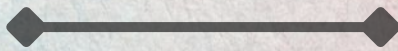Gyan Ganga Institute of
Technology And Science

THE GENESIS

16TH MARCH, 2022

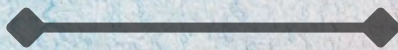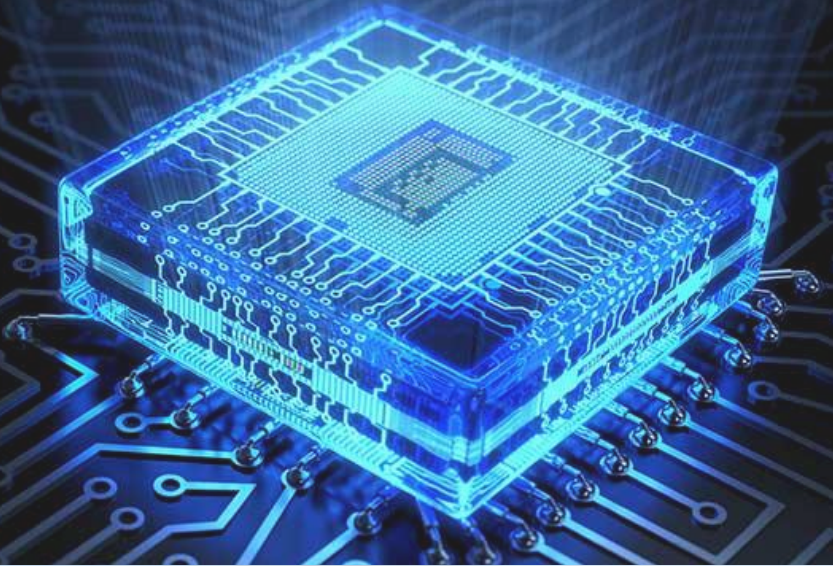| TECH-VERSE	AI - DYNAMICS	CYBER - SPACE
THE COSMOS	COLLEGE INSIGHTS	BOUNDLESS CREATIONS

THE OFFICIAL eNEWSLETTER OF GGITS

Russian Invasion can theoretically cause a shortage of chips throughout the Globe

Two Ukrainian companies, Ingas and Cryoin, responsible for providing 45 to 54 % semiconductor-grade neon for the world, had to halt their operations in their various branches and factories because of the ongoing attacks by Russian troops.

Ukrainian Neon is a byproduct of Russian Steel Manufacturing, and the gas is crucial for lasers used for making chips for electronic devices. This stoppage can initiate a worldwide shortage and uneven distribution of chips, and ultimately electronic devices.

Even if the chip producing firms may have stockpiles, they can run short on neon if the Ukraine-Russia conflict continues. "The largest chip fabricators, like Intel, Samsung, and TSMC, have greater buying power and access to inventories that may cover them for longer periods of time, two months or more," said Lita Shon-Roy, president of Techcet. The smaller Chip producing firms, which cannot afford such a buffer, will face more difficulties. Also, the investors might pull their hands if the production seems to be at a loss due to supply problems.

Even TSMC, Taiwan based world's biggest contract chipmaker, may face problems due to this shortage if they start running low on the Neon gasses' safety stocks they prepared in advance.

China also produces Neon gas, but the already rising prices due to elevated demand for electronic devices after the Covid Pandemic will increase further. The prices had already increased by 500 % since December.

Companies elsewhere could initiate neon production but it would take nine months to two years to ramp up, according to CMO of Supplyframe Richard Barnett.

Written by-
Udyan Saxena
cs-03

Referenced from-
Ocean

AI to detect genetic disorder

AI and big data are playing a growing role when it comes to healthcare. Because the technologies can speed up the process with which healthcare professionals can process and analyze large amounts of data, they can help with everything from medical records and imaging, to diagnostics and developing more advanced medicines.

The groundbreaking study was carried out by Yazeed Zoabi and Dan Lahav, students in Shomron's lab in which a simple blood test is taken from the pregnant mother during the first trimester, which can read the embryo's entire DNA and provide in-depth analysis to detect genetic disorders.

According to the Global Genes organization, eight out of ten rare diseases are caused by a faulty gene, yet it takes an average of 4.8 years to arrive at an accurate diagnosis. This is part of the reason why 30% of children with a rare disease won't live to see their fifth birthday. In the pregnant mother, there are tiny bits of DNA that come from the embryo, from the placenta. If we look at a developing embryo, we can see tiny pieces of the placenta or embryonic DNA and if we could segregate it well enough and separate it then we'll be able to read the entire DNA of the embryo.

This newly developed AI evaluates those small visual changes, calculates similarities, and then automatically connects them to individual patient's clinical symptoms and genetic data.This AI could be used to identify any genetic disease that is caused by a minute number of changes in the DNA.

Written by-
Nandan Patkar
AIML-1

Did You Know ?
This technology might have important applications in early cancer detection.

Reference From-
Forbes CNN

Russia threatens to leave American astronaut stranded in space

Russian official reportedly threatened to leave Mark Vande Hei behind and "detach Russia's segment of the (International Space Station) altogether."

Fallout from the Russia-Ukraine war is threatening Mark Vande Hei's scheduled return to Earth from space at the end of the month. The Benilde-St. Margaret's and St. John's University graduate is set to parachute to a landing in Kazakhstan on March 30 with two Russian cosmonauts.

But President Joe Biden's sanctions against Russia prompted threats from the head of the Russian space agency and ally to Russian President Vladimir Putin: In a Feb. 26 video, Dmitry Rogozin "threatened to leave Vande Hei behind in space and detach Russia's segment of the space station altogether," ABC News reported on Wednesday. Vande Hei is orbiting about 250 miles above Earth aboard the International Space Station, where for more than two decades, U.S. and Russian space agencies have collaborated on research and maintenance of the station.

NASA said Friday it continues to work with all its international partners, including the Russian State Space Corporation Roscosmos, for the ongoing safe operations of the station and the return of crew members to Earth. "On March 30, a Soyuz spacecraft will return as scheduled carrying NASA astronaut Mark Vande Hei and cosmonauts Pyotr Dubrov and Anton Shkaplerov back to Earth," a NASA spokesperson said in an e-mail to the Star Tribune on Friday. "Upon their return, Vande Hei will hold the American record for the longest single human spaceflight mission of 355 days." After Russia invaded Ukraine in February, Biden announced sanctions against Russia, including cutting more than half of the country's high-tech imports, noting that such a move will "degrade their aerospace industry, including their space program," ABC News reported. That prompted Rogozin's threat to abandon Vande Hei. At an international video press conference last spring in Star City, Russia, Vande Hei lauded the successful partnerships that's made space research such a success in the last few decades. He also said he was only scheduled to be in space for six months but said his trip could get extended — which it did — and said that would be a "bonus."

"We try to make sure we're ready for anything," he said.

Written by-
Palak Jaiswal
AIML-1

'For the first time in history anyone can join a war':
Volunteers join Russia-Ukraine cyber fight

Written by-

Faiz Ansari
IOT

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Referenced
From-

CNBC

Cyberwarfare related to the Ukraine-Russia conflict is surging as digital volunteers from
around the world enter the fight. The number of cyberattacks being waged by — and on behalf of — both countries since the outbreak of the war is "staggering," according to the research arm of Check Point Software Technologies.

"For the first time in history anyone can join a war," said Lotem Finkelstein, head of threat intelligence at Check Point Software. "We're seeing the entire cyber community involved, where many groups and individuals have taken a side, either Russia or Ukraine."

"It's a lot of cyber chaos," he said.

In the first three days following the invasion, online attacks against Ukrainian military and governmental sectors increased by 196%, according to Check Point Research (CPR). They also modestly increased against Russian (4%) and Ukrainian (0.2%) organizations, according to the data, while simultaneously falling in most other parts of the world. Since then, Ukrainian authorities estimate some 400,000 multinational hackers have volunteered to help Ukraine, said Yuval Wollman, president of cyber security company CyberProof and the former director-general of the Israeli Intelligence Ministry.

As a long-time target of suspected Russian cyberattacks, Ukraine is seemingly welcoming the digital help. Following a request posted on Twitter by Ukraine's digital minister Mykhailo Fedorov, some 308,000 people joined a Telegram group known as the "IT Army of Ukraine."

SMART INDIA HACKATHON

Gyan Ganga Institute of Technology and Science & Gyan Ganga College of Technology, Jabalpur conducted an Internal Hackathon for SIH 2022.

In SIH 2022 Edition, an Internal Hackathon was organized on 12th March, 2022 within the college campus.

The college is delighted and pleased to announce all the final 15 teams that were shortlisted for their commendable work regarding their projects.

CONGRATULATIONS 🎉 to these teams

RANK	THEME	TEAM NAME	CATEGORY
1	Heritage & Culture	dominatrix 101	Software
2	Smart Vehicle	NARMADA LABS	Software
3	Heritage & Culture	KALA SHAKTI	Software
4	Transportation & Logistics	TECH STUNNERS	Hardware
5	Smart Automation	VIRTUAL BLUES	Software
6	Heritage & Culture	DEVONADIME	Software
7	Blockchain & Cybersecurity	SAFEZONE 2.0	Software
8	Blockchain & Cybersecurity	Binary Dreams	Hardware
9	Smart Automation	TECH & JAMMERS	Software
10	Renewable/ Sustainable Energy	The Metadaters	Hardware
11	Agriculture, Food tech & Rural Development	THE BROGRAMMERS	Software
12	Miscellaneous	Panchayat	Software
13	Transportation & Logistics	PIONEER	Hardware
14	Smart Automation	EX INNOVATION	Software
15	MedTech/ BioTech /Healthcare	E=mc^2	Software

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Ankita Sahu
AIML-1, 2nd Sem

खिला हुआ सा फूल होती है मां , मुरझाने पर कभी नहीं रोती है मां, खिलने पर जिसकी महक से
सम्पूर्ण परिवार खिलखिला उठे, न जाने किस खुदा का रूप होती है मां, जिस खुदा को बनाया भी किसी खुदा ने बढ़ी फुर्सत से।

सूरज के बाद जो घर पर सबसे पहले उठे वह होती है हम सब की मां,

कहने से पहले सब काम कर देती है मां भले ही उसका काम अधूरा हो, ख़ुद भले ही भूखे सो जायेगी पर घर के सभी लोगो का पेट भरके सोती है मां,

खुद के सारे सपने छोड़ अपनो के सपने सजाती है मां   खुद की उसे कोई फिकर नही बस…… बस दिन रात दूसरो की फिक्र करती है मां।
खुद की खुशी जरूरी नहीं परंतु, सबको खुश रखती है मां।
इसलिए तो कहते है बड़े ही खुश किस्मत होते है वो लोग जिनकी होती है मां।   ~याना जैन

CS03, 2nd Sem

Boundless

Creations

बताना सबसे की मुस्कान में मेरी

मैं देता सबका साथ पर कोई न

कुछ तो राज़ था। कहना, क्या पता वो ख़ुश था

मेरे साथ था।

या गमज़दा था।

शायद किसी से करके इश्क़ उस

बोझ में लदा था।
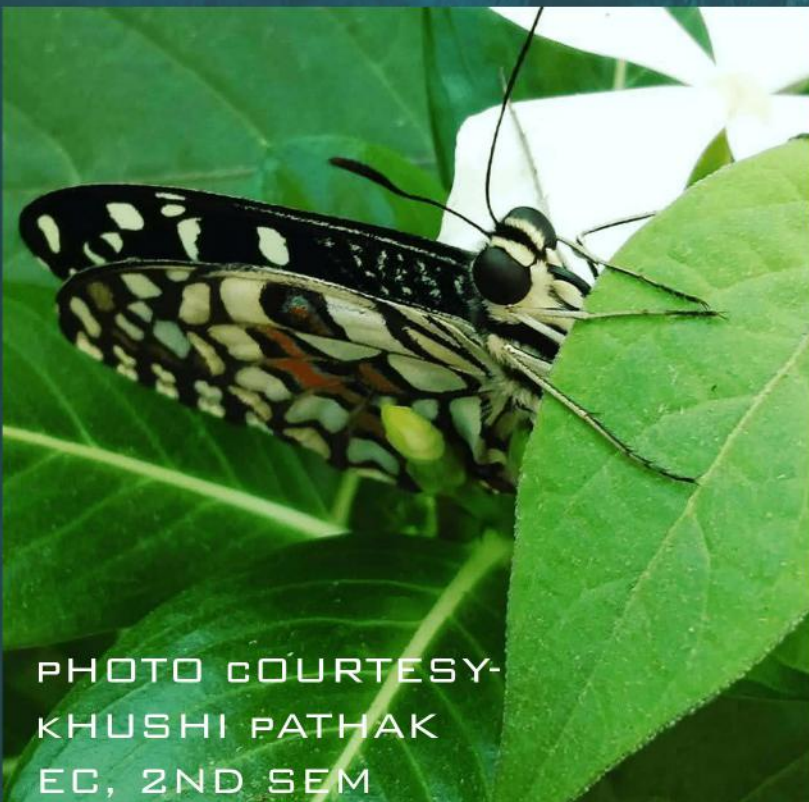
:- SHRAJAL SAHU
CS03, 2nd Sem

PHOTO COURTESY-
KHUSHI PATHAK
EC, 2ND SEM

Thank You

Our E-Newsletter is open to all, you can share your articles by contacting with any one of the members.

If you are Interested in sharing your article or content, feel free to share with us.

Contact Us:

The Genesis Club

The Genesis

thegenesis@ggits.org

thegen.esisggits