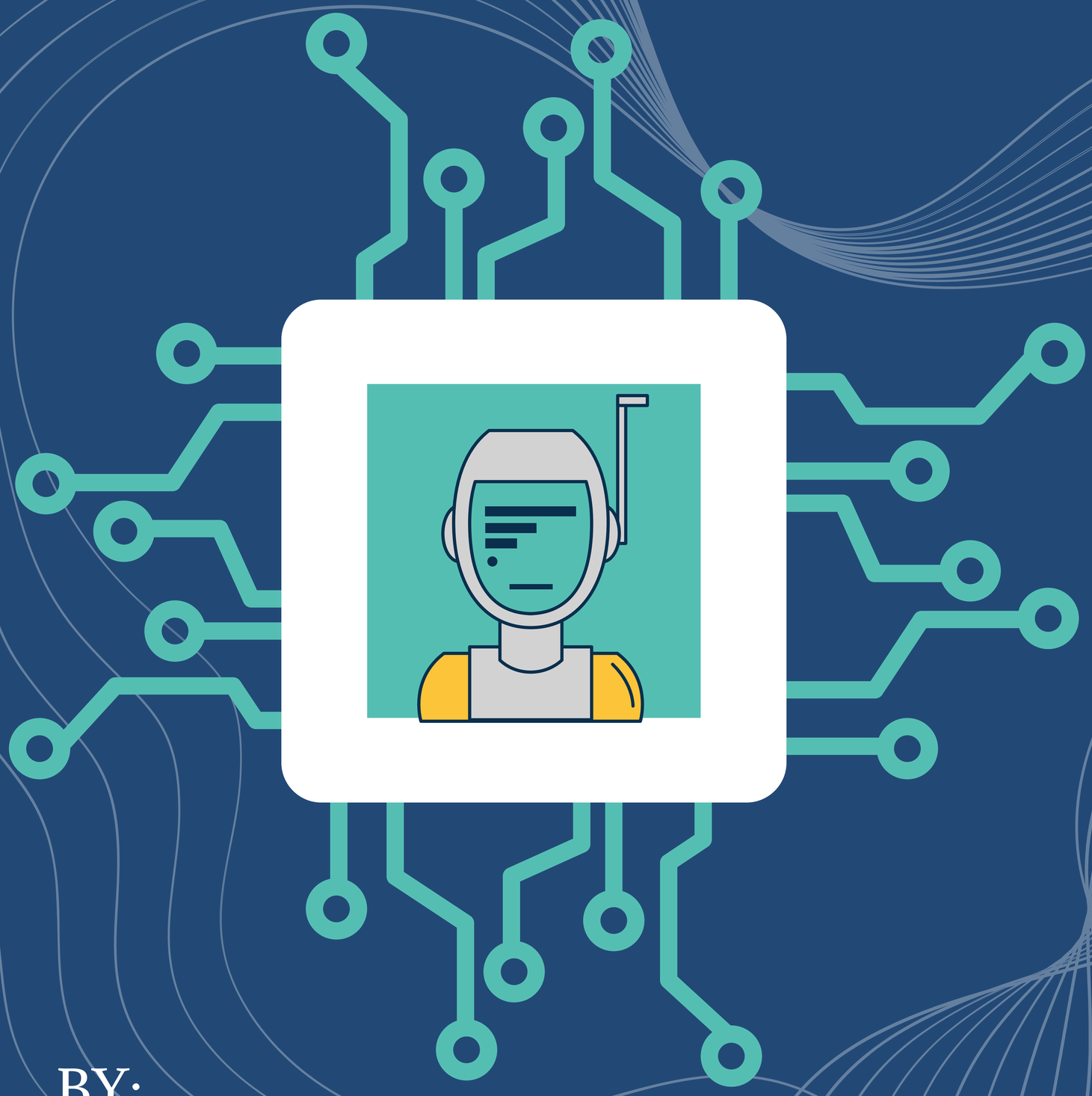
DEPARTMENT OF COMPUTER SCIENCE

INFO-T CLUB

PRESENTS

IT BUZZER



BY:

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KURI ROBOT

Mayfield Robotics, a Bosch-backed startup, announced Kuri in 2018. Designed as a friendly home companion, and priced at US $700, Kuri came with a built-in camera, microphones, speakers, and touch sensors. It also featured a laser-based sensor array for obstacle detection, localization, and navigation. The company had an experienced team of engineers who paid special attention to human-robot interaction. While they gave Kuri speech recognition, the robot didn't talk back, instead relying on a variety of chirps, beeps, and bloop noises and its expressive head and eyes to communicate.

Despite initial excitement, Mayfield Robotics announced in 2018 that it would cease Kuri's manufacturing and refund customers who had pre-ordered the robot. In a statement, the company said that "after extensive review, there was not a business fit within Bosch to support and scale our business." The decision came as the market saw social home robots struggling to establish their value and functionality when compared to more affordable digital assistants.

Kuri is a small, mobile robot standing at around 20 inches tall with a round body and expressive eyes on a screen. It had a variety of sensors and features that allowed it to navigate and interact with its environment. Some of its capabilities included:

Movement: Kuri could move around autonomously using its built-in wheels and sensors. It is able to navigate through different rooms and avoid obstacles.

Interaction: Kuri had the ability to respond to voice commands and gestures. It could understand and react to simple instructions, play music, and provide audio responses.

Communication: Kuri had built-in speakers and a microphone, allowing it to play music, podcasts, and audiobooks. It also had the ability to make various sounds and convey emotions through its expressive eyes.

Monitoring: Kuri featured a built-in camera that allowed users to remotely monitor their homes. It could capture photos and short videos and send them to the user's smartphone.

Entertainment: Kuri was equipped with various entertainment features, such as playing music, podcasts, and acting as a smart home assistant, controlling compatible smart devices.

LUMINAR TECHNOLOGIES

Luminar Technologies was founded in 2012 by **Austin Russell**, who started the company when he was just 17 years old. The idea behind Luminar came from Russell's fascination with photonics and LiDAR technology, which he believed held immense potential for the development of autonomous vehicles.

Early Years and Technology Development:

In its early years, Luminar operated in stealth mode, working on developing cutting-edge LiDAR technology. LiDAR, short for Light Detection and Ranging, is a remote sensing method that uses laser light to measure distances and create high-resolution 3D maps of the environment. It is a crucial technology for autonomous vehicles as it enables them to perceive and understand their surroundings.

Luminar focused on improving LiDAR sensors to address the limitations of existing technologies, particularly in terms of range, resolution, and cost. The goal was to create LiDAR sensors that were reliable, affordable, and suitable for mass production to support the widespread adoption of autonomous driving.

<u>Key Points about Luminar Technologies</u>:

1. **<u>LiDAR Technology</u>**: Luminar's core focus is on LiDAR technology, which plays a crucial role in enabling autonomous vehicles to "see" and understand their surroundings. LiDAR sensors use laser beams to create high-resolution 3D maps of the environment, providing essential data for autonomous driving systems.

2. **<u>High-Performance LiDAR</u>**: Luminar is known for its high-performance LiDAR sensors that have long-range capabilities and high-resolution scanning. Their sensors are designed to work in various environmental conditions, including low-light and challenging weather conditions.

3. **<u>Iris® LiDAR:</u>** Luminar's flagship product is the Iris® LiDAR, which is designed for use in autonomous vehicles. The sensor offers a wide field of view and long-range detection, making it suitable for advanced driver assistance systems (ADAS) and autonomous driving applications.

4. **<u>Perception Software</u>**: In addition to their hardware solutions, Luminar also provides perception software that complements their LiDAR sensors. The software helps process the vast amounts of data collected by the LiDAR sensors, enabling real-time object detection, tracking, and decision-making for autonomous vehicles.

POLLY

Polly is an electronic Wi-Fi enabled device that will assist users in learning and reinforcing braille concepts. With many components for both input and output, Polly can provide practice and gamify the braille learning process for students. In addition to learning phonics, letters, and braille contractions, students can practice typing on the keyboard and writing with the electronic slate during games. Reading and writing games include Letter Race, Balloon Pop for spelling, games for practicing dot location with different input methods, and the many Explore categories provide free play with the device for our youngest learners. The speaker and headphone jack provide auditory instructions and allow the device to be used in any environment. When visually impaired children learn braille in a classroom, their teachers can let them know how they're doing. But many of those students don't have braille readers at home to help them. Now they can use Polly—a wi-fi-enabled device developed by American Printing House for the Blind and Thinkerbell Labs that provides braille learners with instant audio feedback and allows teachers to assign and assess homework remotely. Instead of a standard metal or plastic slate used with paper, learners can write (and correct mistakes) using Polly's electronic braille slate and stylus—the world's first.

INDIA'S DIGITAL RUPEE

The Reserve Bank of India (RBI) is preparing to unveil its much-anticipated central bank digital currency (CBDC) - the digital rupee. This innovative digital form of legal tender aims to offer Indians a convenient and secure way to transact money digitally. Differentiated from cryptocurrencies like Bitcoin, the digital rupee will be regulated and issued by the RBI, serving as a viable alternative to physical cash and transforming India's financial landscape.

Understanding Digital Currency:

Digital currency is a form of currency that exists entirely in electronic form, operating solely within computer networks. Three prominent categories of digital currencies include cryptocurrencies, central bank digital currencies (CBDCs), and stablecoins. Cryptocurrencies, such as Bitcoin and Ethereum, leverage blockchain technology and boast a vast array of over 21,000 coins according to CoinMarketCap.

Advantages of the Digital Rupee:

1. Faster Mode of Payment: The digital rupee will enable lightning-fast transactions, outpacing traditional payment methods like wire transfers.
2. Cheaper Global Transfers: The digital rupee can revolutionize cross-border transactions, making them more cost-effective and swift.

Disadvantages of the Digital Rupee:

1. Options and Complexity: The plethora of digital currencies in the market can lead to confusion and uncertainty about which ones are suitable for specific use cases, requiring time and research.
2. Steep Learning Curve: Users may face challenges in adopting digital currencies due to the need to understand digital wallets and secure asset storage. Streamlining the user experience will be vital for widespread adoption.

Differentiating CBDC from Cryptocurrencies:

The RBI's digital rupee is not a cryptocurrency but a central bank-issued digital currency that will function as legal tender and be backed one-to-one with fiat currency. Unlike cryptocurrenciesthe digital rupee will be regulated and governed by the RBI.

The Need for the Digital Rupee:

By introducing the digital rupee, the RBI aims to propel India into the digital currency era, capitalizing on the growing importance of cryptocurrencies and blockchain technology. The digital rupee's numerous advantages, have the potential to revolutionize the Indian economy.

Conclusion:

The forthcoming launch of the digital rupee holds great promise for India's financial landscape. With its secure and efficient nature, the digital rupee can pave the way for a cashless economy, reducing the demand for physical cash, enhancing government payment systems, and facilitating seamless cross-border transactions.

RIDDLE RIOT

I'm a network of networks, vast and wide,
Connecting the world, far and wide.
From emails to websites, I carry the flow,
What am I called, do you know?

I'm a system of code, controlling the show,
On your computer, I make things go.
From the start-up screen to the desktop view,
I handle it all, ensuring it's all true.
What am I?

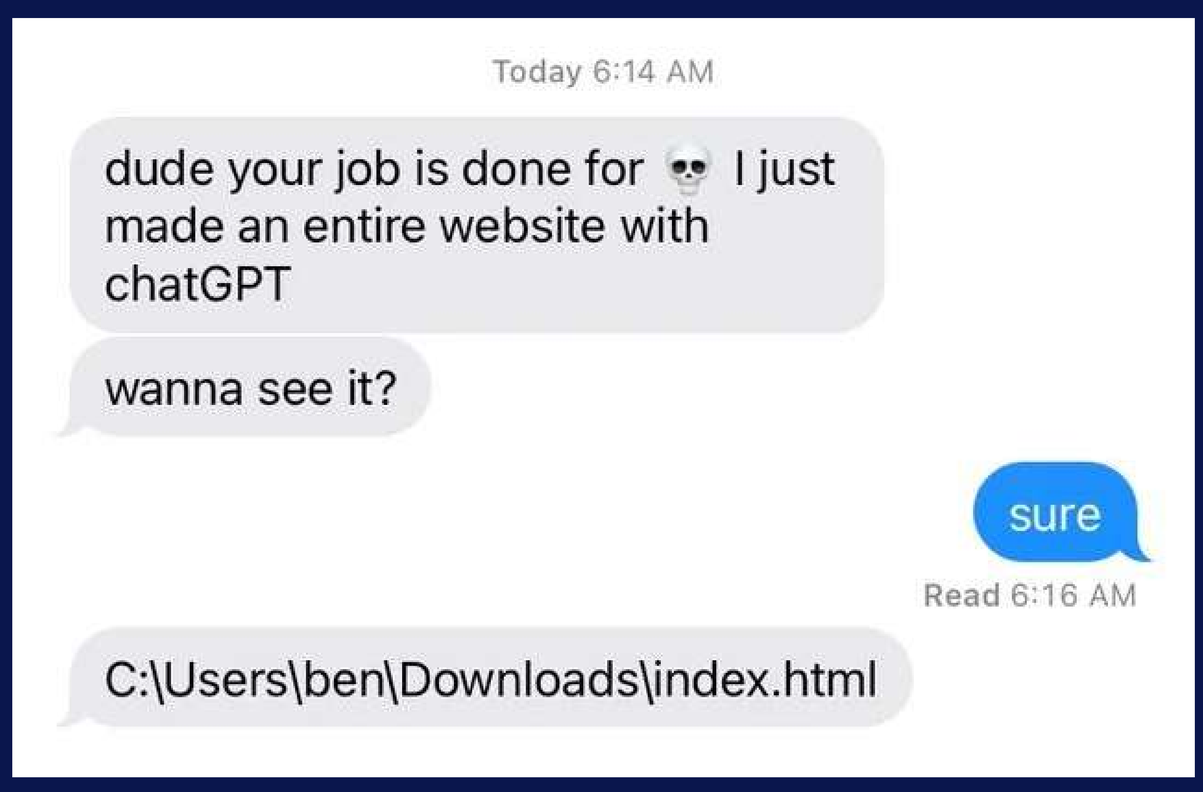
I'm a website's address, easy to find,
A user types me to visit a site that's aligned.
With "www" or without, I lead the way,
What am I called, do you have a say?

I'm a cloud above, but not in the sky, Storing data remotely, I'm always high. From emails to files, I hold them all, In a virtual world, I stand tall.

I'm a protocol, connecting us all, With packets of data, I'll never let you fall. From browsing the web to video calls,
I'm the backbone of the digital halls.

Answers:1.The Internet, 2.An operating system ,3.URL, 4.Cloud Storage ,5.TCP/IP

BYTE-SIZED BANTER



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