



NEWS HIGHLIGHTS

WhatsApp refuses to share user-specific data with SEBI

Razorpay to power UPI on IRCTC

Amazon's Alexa takes open-source route to beat Google into cars

CFTC gives green light for employees to trade cryptocurrencies

Crypto hedge funds sprout in India unfazed by regulatory cloud

Today's View

Dangerously Hacking Electric Sensors

Cyber-attacks, or rogue attempts to target computer networks, and/or personal computer devices, have established a new target in electric sensors now. These are electrical components that turn analogue signals like radio, sound, light, etc. into an electrical signal that can be easily processed by a computer. Such attack exploits a vulnerability in the “physics” of a sensor to manipulate its output or induce intentional errors.

Due to the uniqueness of such attacks, traditional tools for managing cyber security such as modifying and upgrading software codes are not effective in mitigating such attacks. Instead, physical changes have to be made to actual electric sensors. For instance, in a recent attack on accelerometer sensors manufactured by **Analog Devices (ADI)**, software changes were ineffective. Hence, the company had to utilise physical methods such as using inner mounting posts and placing physical trenches around boards to dampen the effect of vibrations on the affected sensor.

This concept has the potential to disrupt a wide variety of devices: right from interfering with heart pacemakers to making self-driving cars blind to obstacles. For example, something as simple as a sound from a **YouTube** video could be used to control the behaviour of a smartphone’s MEMS accelerometer.

These attacks have some real life implications as well. For example, one sensor-based attack, better known as **“DolphinAttack”** used inaudible ultrasonic commands to show how voice-based assistants, such as **Siri**,

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KYC rules for e-wallet to kick in today

Today onward mobile wallets would be required to submit a full KYC for their users.

RBI'S STAND Every payment instrument will have to abide by the KYC norms as they are also part of the extended banking ecosystem

PCI APPEALS Revoke the order and allow wallets till ₹10,000 to operate without full KYC



Without this, consumers will not be able to load funds into the wallet or transfer to other wallets.

Source – *The Economic Times*

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Date – 01st Mar 18

Google Now, Cortana, Alexa, Samsung S Voice, Huawei HiVoice, etc. can be tricked to initiate phone calls or visit websites without authorisation.

Implications of these can be more dangerous than we think. For instance, voice-controlled navigation system in cars like **Tesla** and **Audi** were also found to be vulnerable to these type of attacks. Even in case of other cars that can connect to **Pandora** or **Spotify**, it may be possible to connect to it remotely and take control of the many systems that are controlled by the software installed. In another hack, laser pulses were used to trick the LiDAR sensors of smart cars into seeing phantom objects and making them slow down or stop abruptly without permission.

We feel that in order to mitigate such attacks, all the stakeholders from manufacturers to software developers must work together to create purpose-built systems that can withstand both cyber as well as sensor-based attacks. Additionally, the scope of design engineers needs to be made more interdisciplinary with emphasis on understanding of both digital and physical systems and processes.

Today's News

WhatsApp refuses to share user-specific data with SEBI

WhatsApp declined to share user-specific data with SEBI, citing its privacy policy. The regulator had written to WhatsApp, seeking information on the origin of messages that allegedly contained unpublished price-sensitive information of listed companies. The information is crucial for SEBI's investigation into the leakage of financial data at blue-chip companies.

Under current regulations, WhatsApp is not obliged to provide the information to SEBI. The regulator could pursue the matter by moving court against WhatsApp. However, such a move could be sensitive since it might amount to an infringement of personal space.

Source – *Business Standard*

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Razorpay to power UPI on IRCTC

Payment solutions company Razorpay has collaborated with Indian Railway Catering and Tourism Corporation (IRCTC) to help customers make online payments on latter's website and mobile app through UPI.

"Razorpay's partnership is intended to offer a frictionless payment experience to consumers through the UPI channel and help users get comfortable with digital money, which will eventually help in increasing adoption of digital payments," Razorpay said. Razorpay's payment gateway is expected to process more than a mn transactions a month on IRCTC website and mobile app.

Source – *The Economic Times*

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This News Letter has been prepared with the assistance of **Sadhika A. and Manish Kulkarni**

NestAway gets funding of \$51M from Goldman Sachs

Online shared and family home rental platform, NestAway raised \$51 mn from Goldman Sachs and UC-RNT fund.

The publication reports that Goldman Sachs has put \$19 million through its India and Hong Kong investment arm, and UC-RNT has put in \$16 million, and the existing investors Tiger Global and IDG India also participated in this round.

Source – *Medianama*

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Amazon buys Ring for over \$1bn

Amazon acquired video doorbell and home security camera maker Ring in a deal over \$1bn, as it pushes further into the IoT and in-home-delivery space.

The deal values Ring at between \$1.2bn and \$1.8bn. It fits in with Amazon's move into the home security market, driven by a bet on delivering packages inside shoppers' homes to boost sales.

Source – *The Guardian*

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Baidu's video streaming service iQiyi files for US IPO

iQiyi, Chinese video streaming service recently valued at \$15bn, filed for an IPO in the US. Owner Baidu confirmed last week it was filing documents with the US SEC to list the streaming unit in the US. It gave an IPO size of \$1.5bn - a placeholder estimate.

Source – *Financial Times*

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Amazon's Alexa takes open-source route to beat Google into cars

Amazon.com is embracing open-source software in the race to get its voice-based Alexa digital assistant into cars ahead of Google. Amazon engineers are working with Nuance Communications Inc. and Voicebox Technologies Corp. to write code that makes in-vehicle apps compatible with several speech-recognition technologies, eliminating the need for developers to make multiple versions.

The cars must use Automotive Grade Linux, an open-source platform being developed by Toyota Motor Corp. and other auto manufacturers and suppliers to underpin all software running in the vehicle.

Source – Bloomberg

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CFTC gives green light for employees to trade cryptocurrencies

The U.S. Commodity Futures Trading Commission (CFTC) has given its employees the green light to invest in cryptocurrencies. CFTC's general counsel, Daniel Davis, gave the go-ahead in a memo earlier this month, in response to "numerous inquiries" from employees.

While members of the agency can now invest in cryptocurrencies, they are still prohibited from crypto futures or margin trading, and from using insider information gleaned through their jobs. Employees cannot investigate or participate in regulatory actions involving cryptocurrencies they own.

Source – Coindesk

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Crypto hedge funds sprout in India unfazed by regulatory cloud

In Jan, Authorito Capital, a crypto hedge raised money for its second open-ended fund of around \$50 mn — just 1 year after the debut of its first fund. Authorito's CEO Mohit Mamoria said it was the 15x return delivered to investors in his first fund, which prompted him to raise a larger crypto fund.

While globally there are over 200 crypto hedge funds, in India the business of crypto asset management is relatively new with a few funds that have sprung up in the past 12-14 months. Globally, funds like Polychain Capital, Meta-Stable Capital are backed by marquee venture firms Sequoia Capital and Andreessen Horowitz.

Source – The Economic Times

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Cognizant's headcount in India drops by 8000 in 2017

Cognizant's headcount in India dropped by 8000 at the end of 2017, while employees in the US and Europe rose. At the end of 2017, Cognizant employed about 260,000 people, out of which 180,000 were in India vs 188,000 in 2016. Indian IT companies are seeing falling headcounts as automation and a need to create talent overseas makes investing in India headcount far less important.

Source – The Economic Times

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Amazon launches ad-free music streaming service

To make its Prime offering more lucrative, Amazon India has launched Amazon Prime Music, an ad-free music streaming service.

The service is available exclusively for Prime members and includes features like unlimited offline downloads, and voice controlled search with Amazon's personal assistant software — Alexa.

Source – Business Standard

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Hero MotoCorp aims for more rides with start-ups

Trends in the automobile industry are changing fast. Hero MotoCorp is planning to partner more start-ups.

This would be in addition to the company's plan to step up sales in overseas markets. The engagement with start-ups could be in the form of an investment or collaboration in the area of mobility.

Source – Business Standard

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Paytm to boost legal firepower

Paytm to appoint veteran lawyer Pallavi Shroff as a board member to boost legal firepower in the battle with rivals Facebook, Google and others in the country's booming but fast-changing digital payments market.

Source – Livemint

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