

# **PEOPLE ANALYTICS**

# BANK ATM MONITORING USING ARTIFICIAL INTELLIGENCE



Employees use ATM machines at Axis Bank's corporate headquarters in Mumbai, India, July 25, 2017. Credit: Reuters/Danish Siddiqui/Files

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# CHALLENGE

There are over 3 million ATMs installed on and off-site by different banks across the world. All these ATMs see thousands of transactions every hour which puts the security of the ATMs in question. In spite of the security personnel provided by the banks for the ATMs, thefts, assaults, and property damages are a regular occurrence. This called for the need of an intelligence based system which would alert security guards on real-time if there are any suspicious activities inside or outside the ATMs to improve the security of customers as well as the banks.

### O Oherald

### Have Goa's gruesome crimes bridged the outsider-insider

Even before the blood dries- as it were- on one crime, another ... look at all the burglaries, ATM thefts, drug cases etc they are all committed by outsiders. ... In recent years, goons gangs and goondas have been 5 days ago

Sunday World

### and ...

3 days ago

Man who planned to remove ATM machine with blowtorch He planned to pump a gas mixture into the ATM machine in a bid to ... for all the latest Sunday World News, Crime, Irish Showbiz and Sport.

Crime

### WORLD OF BUZZ

S'porean Man Faces Jail After Correctly Guessing Pin Number ...

Yap has since pleaded guilty and also admitted to one count of dishonestly misappropriating the ATM card. Two more counts of theft charges 4 days ago

### The Voice St. Lucia

### Taiwan - Crucial to the Global Fight Against Cybercrime

According to World Health Organization statistics, as of September 30, 2020, ... infringements on intellectual property rights, and the theft of trade secrets. ... identifying a state-s ored hacking organization that has recently been ... In September that same year, a similar ATM heist 1 day ado

### ht Hindustan Times

Gurugram: Two held for 24 ATM thefts across three states 😂 Hindustan Times

The Faridabad police, on Friday night, arrested two members of an interstate gang who allegedly loot automated teller machines (ATMs) in at ... Mar 28, 2020

### ht Hindustan Times

Money heist, Delhi edition: Instances of uprooted ATMs increase over six months



ATM theft, thievery, Delhi crime. An analysis of the reported cases shows that a majority of the thefts took place in February and March, before ... Aug 21, 2020

### ht Hindustan Times

Rs29 lakh stolen from ATM in Khalapur A group of unknown persons broke into an ATM kiosk in Khalapur and stole 🛛 🕤 Hinhustan Times ₹29.01 lakh within an hour after damaging the ATM in the early .

Sep 26, 2020

### atm ATM Marketplace

Excuse me sir, but you have an ATM attached to your truck An alarming amount of ATMs have been physically stolen from ... stories from across the country and around the world about ATM theft. ... In a small town in Illinois recently, an ATM containing approximately \$8,000 was stolen Aug 7, 2020



### Euro Weekly News

'Extremely reckless' explosive theft from ATM in Southport 'Extremely reckless' explosive theft from ATM in Southport ... For more UK daily news, Spanish daily news and Global news stories, visit the ... 1 month ago

### 🐠 Birmingham Alive

Cybersecurity Market Research Report: Improvement Study by ...

Global Cybersecurity Market is valued at USD 157.07 Billion in 2019 ... that only ATM card theft was the most commonly reported cybercrime to ... 55 mins ago



### Taiwan - Crucial to the Global Fight Against Cybercrime

Since emerging in late 2019, COVID-19 has evolved into a global ... infringements on intellectual property rights, and the theft of trade secrets. ... In September that same year, a similar ATM heist occurred in Romania. 1 day ago

### m Daily Host News

Globalnews.ca

October 5, 2020 3:

Slobalnews.ca

1 month ago

RCMP

Mar 31, 2020

RW BW Businessworld

ATM stolen from Vernon business

Gilligan Global News. Posted March 31, 2020 8:

### Comparing top 11 cyber protection solutions for businesses

Smart Alerts: The global network of Acronis Cyber Protection Operation cave utilization detection, credential theft prevention, and APC protection. and servers, Mac Computers, and Point of Sale (POS) and ATM endpoints 1 hour ago

ATM stolen from Vernon business, By Megan Turcato Global News, Posted

4 charged in central Alberta ATM theft, police pursuit:

4 charged in central Alberta ATM theft, police pursuit: RCMP. By Melissa

Wanted criminal in several ATM robbery cases held in

against the accused for theft from ATM machines. At present, the ..

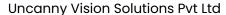






1 month ago

Delhi







# SOLUTION

An artificial intelligence based system to smarten the existing surveillance cameras installed inside and outside the ATMs. A process of continuous monitoring and predictive analysis of actions in ATMs set up to detect suspicious activities, and alert the necessary authorities to avoid mishaps.

The existing e-surveillance systems require a person monitoring alerts coming from hundreds of ATMs at a time and manually intruding to take actions in case of any anomalies. What Uncanny Vision does is, add intelligence to this system, by triggering alerts only in case of a real threat.

# WHAT CAN BE MONITORED?



# **Camera tampering**

Detection of this action when someone touches the CCTV cameras installed in the ATM and generate real-time alerts

# Crowding

Detect the presence of multiple people inside the ATMs to ensure adherence to the compliance code.



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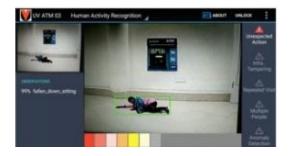


# Loitering

- 1. Detect if a person is loitering around or inside the ATM for a longer duration.
- 2. Detection of a person sleeping inside the ATM

# Detection of Anomalous behaviour

Detect any anomalous actions inside the ATM like a person falling off, etc.



# ATM1

# ARCHITECTURE

The existing infra consists of all ATM cameras connected to their individual Intrusion Panels. These intrusion panels send events to the ICCC platform

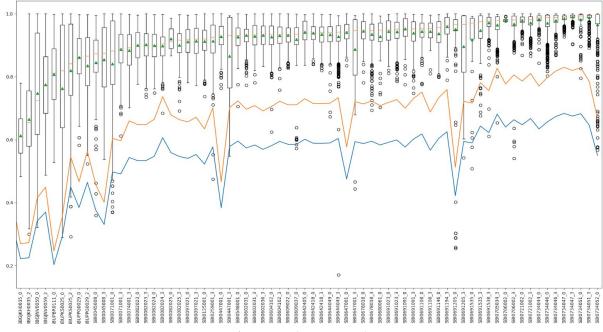
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which in turn displays all the events on a video wall. This wall is continuously monitored by the bank personnel to report suspicious activity. Uncanny Vision simplifies by adding intelligence to this system and generates 'Triggered events', only the events that require actual attention from the personnel.

# RESULTS

Our solution has been deployed in 5000+ ATMs across India along with pilots in Europe and SouthEast Asia(SEA). All the surveillance systems are working with high accuracy in generating alerts for the anomalies detected in the ATMs. Our system is continuously monitoring with very minimal downtime.



Result of Tampering check in an ATM



# **About Uncanny Vision**

Uncanny Vision is an award-winning AI-based Computer Vision company delivering next generation real-time Edge-based Video Analytics solutions for Smart Cities, Smart Buildings, Smart Parking & Smart Infrastructure – specifically for People & Vehicle Monitoring using cameras. We enable cameras to "see" and "understand" their environment instantly using AI/Deep Learning algorithms. Core solutions include People, Vehicle count, classification as well as high accuracy License Plate Recognition used by many cities around the world. Using unique optimization techniques, Uncanny Vision provides this solution on low-cost Edge AI processing systems powered by Intel and on high performance Data Center or Cloud systems powered by Nvidia.





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# **Our Products**

Uncanny ANPR Uncanny Vehicam Uncanny Shield

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